



# Early Child-care Arrangements and Both Parents' Subjective Well-being

Valérie-Anne Ryser<sup>1</sup> · Marieke Heers<sup>1</sup>

Accepted: 26 August 2022 / Published online: 17 October 2022  
© The Author(s) 2022

## Abstract

This study focuses on Switzerland where child-care is limited in offer and costly. It examines what child-care patterns parents of 0- to 4-years old children use; and, how different arrangements relate to several domains of mothers' and fathers' cognitive and affective subjective well-being (SWB). A major contribution of the present study is the distinction between child-care provided by parents, grandparents, relatives, formal institutions and mixed arrangements. Based on data from the Swiss Household Panel (SHP) from 2002 to 2017, multilevel regression models are applied to estimate the relationship between child-care arrangements and both parents' SWB. The results demonstrate that grandparental care relates positively to both parents' SWB: Compared to grandparental child-care, relatives and formal or mixed child-care arrangements tend to decrease most of the satisfaction dimensions. Formal child-care and child-care provided by relatives as well as mixed arrangements relate to a decrease in positive affect. Negative affect is not significantly associated to the different child-care arrangements.

**Keywords** Child-care · Subjective well-being (SWB) · Parenthood · Swiss Household Panel (SHP) · Multilevel analysis

## Highlights

- Based on a nationally representative sample, this study differentiates a large array of child-care arrangements.
- The relationship between child-care type and five dimensions of both parents' subjective well-being (SWB) is analyzed.
- Relatives, formal and mixed child-care arrangements decrease the level of most of the satisfaction dimensions of SWB.
- Child-care provided by relatives as well as formal and mixed arrangements relate to a decrease in positive affect.
- Grandparental care relates positively to both parents' SWB dimensions.

## Introduction

With an increasingly large share of working mothers, a growing number of parents rely on non-parental child-care to enable them managing the simultaneous and challenging demands of work and family (e.g. Baker et al., 2008; Havnes & Mogstad, 2011; Pilarz & Hill, 2017). Formal and informal child-care arrangements as well as mixed arrangements that combine different child-care arrangements are distinguished. However, formal, or

institutionalized, child-care has received most research attention and most studies did not account for the frequent use of mixed arrangements (Tran & Weinraub, 2006). A large share of the literature on early child-care has focused on how formal or different types of informal child-care relate to children's cognitive development and revealed mixed findings (e.g. Ansari et al., 2021; Magnuson et al., 2007; Verhoef et al., 2018; Votruba-Drzal et al., 2013). With respect to parental outcomes, the literature has mostly focused on the relationship between child-care availability and mothers' labor supply. This has been investigated in multiple contexts and, overall, shows that an increased offer in publicly provided child-care is associated with higher levels of maternal employment (e.g. Aassve et al., 2012; Arpino et al., 2014; Baker et al., 2008; Felfe et al., 2016; Lefebvre & Merrihan, 2008; Schober & Schmitt, 2017). Another line of

---

✉ Marieke Heers  
Marieke.Heers@unil.ch

<sup>1</sup> FORS Swiss Center of Expertise in the Social Sciences c/o  
University of Lausanne, Géopolis, 1015 Lausanne, Switzerland

studies has evaluated how subsidized formal child-care relates to different aspects of parents' well-being, and provides mixed results (Connolly & Haeck, 2015).

Only few studies take a broader perspective and consider how child-care arrangements different from formal arrangements relate to both parents' subjective well-being (SWB). These studies reveal that, compared to formal child-care arrangements, grandparental care is related to less parental stress (Craig & Churchill, 2018); mixed arrangements do not seem to be consistently related to parental stress (Pilarz & Hill, 2017). However, there is a lack of research on the extent to which different child-care arrangements relate to both parents' overall SWB in broader terms. The relationship between child-care arrangements and SWB is crucial because parents' SWB is a key predictor of children's well-being and development (Connolly & Haeck, 2015).

The aim of this study is to fill that gap. It contributes to the literature by empirically testing how different child-care arrangements compare in their relationship with both parents' SWB using data from the Swiss Household Panel (SHP; SHP Group, 2020; Tillmann et al., 2016). A major contribution of this study is the differentiation of parental, formal, informal and mixed arrangements child-care arrangements. With the SHP-data we are able to assess the distribution across a large array of child-care arrangements and how they relate to several domains of both parents' SWB. In this study, SWB includes both the cognitive (e.g. life satisfaction) and the affective dimensions that comprise positive (e.g. optimism, joy) and negative (e.g. depressive symptoms, anger, sadness, worries) affects (Diener, 1984; Diener et al., 1985).

## Institutional Context

With its market-oriented welfare state arrangement, Switzerland provides a minimal level of family welfare characterized by low state support for dual earner families; accordingly, child-care is considered a private matter (Burstrom et al., 2010; Lundberg et al., 2008; Matysiak & Węziak-Białowolska, 2016). Liberal countries, such as the US and Switzerland, rather provide limited and costly public child-care. Both countries present similar characteristics such as the legislative system at the federal level and embody individualism and primacy of the market. In a recent comparison of 41 high- and medium-income countries, Switzerland scored last in terms of family-friendly policies (Chzhen et al., 2019). In Switzerland and according to federal law, employed women are entitled to 14 weeks of maternity leave (Swiss Confederation, 2022). This right is subject to the following conditions: A woman must have been insured with a disability insurance during the nine

months preceding the birth; have worked at least five months during the pregnancy and have been employed at the time of the child's birth. From a legal perspective it is possible to prolong the paid maternity leave and take an unpaid leave of two weeks. Beyond these two weeks, mothers who would like a longer leave have to ask their employer who can decide whether to grant the mother a longer unpaid leave. Since 2021, employed fathers are entitled to two weeks of paternity leave. The maternity and paternity leave allowances amount to 80% of income, with a ceiling for high incomes. More generous benefits are possible according to cantonal provisions, collective regulations and labor agreements. At the end of the maternity leave, parents can theoretically enroll their child into any form of child-care arrangement.

The Swiss context can further be described as a 'modernized traditional family model' (Levy & Widmer, 2013), where the one-and-a-half earner model is common and inequalities between men and women in terms of participation in paid and unpaid employment remain quite strong. While fathers have become more actively involved in the raising of their children, in line with the modernized traditional family model, mother still carry the major load. Compared to other European countries, Switzerland has a large share of working mothers; however, most of them work part-time (Widmer and Ritschard, 2009). Child-care spending depends on whether parents rely on subsidized public child-care (mostly formal) for which the cost is adjusted to the household income or non-subsidized private child-care, for which the cost is independent of the household income. Even for subsidized child-care the costs remain high. The costs further depend on the area of living and on the number of children. Family deductions exist but vary across regions.

## Child-care Arrangements and Their Implications for Parental SWB

Formal child-care is formalized by a binding contract and is usually delivered through state, market or voluntary institutions such as nurseries, childminders, nannies, day-mothers or out-of-school clubs (Wheelock & Jones, 2002). Parents making use of informal child-care usually rely on their social network such as relatives, friends or neighbors and usually on an in-kind basis (Bernal & Keane, 2011; Wheelock & Jones, 2002). Grandparents are the most common informal child-care providers (Del Boca et al., 2018; Wheelock & Jones, 2002). Mainly due to availability and affordability, some parents rely on multiple child-care providers (e.g. grandparents plus kindergarten or an at-home caregiver plus kindergarten or relatives); referred to as mixed child-care arrangements or multiplicity (Craig & Churchill, 2018; Morrissey, 2008; Pilarz & Hill, 2017). In

the literature, there is a distinction between paid and unpaid child-care (Arpino & Luppi, 2020) that can be linked to formal and informal child-care. In this article, we define formal child-care as those types of child-care that are based on a contract such as kindergarten, childminders or nannies; hence, there is a market economy of goods and services. Informal child-care, on the other hand, is related to an economy of gift and counter-gift: As stipulated by social exchange theory, informal caregivers, mostly the grandparents, might anticipate long-term reciprocity in the parent-child relationship (Geurts et al., 2012).

Compared to formal child-care, informal child-care has received less attention by prior research (Del Boca et al., 2018; Fergusson et al., 2008). A major reason is the lack of official statistics and the difficulty to quantify informal child-care arrangements. In addition, informal child-care entails lower public costs. Much of the literature has focused on how children are affected by different types of child-care, for example in terms of cognitive and social-emotional development (e.g. Verhoef et al., 2018). Except for women's labor supply, parental outcomes were considered in relation to subsidized formal child-care but hardly in relation to other child-care arrangements (e.g. Brodeur & Connolly, 2013; Herbst & Tekin, 2014).

In most studies, the default is parental child-care to which other arrangements are compared. The only study that has considered formal *and* informal child-care in relation to parental outcomes focuses on parenting stress in Australia (Craig & Churchill, 2018). Based on an analysis of the data on Household, Income and Labour Dynamics in Australia (HILDA) the authors show that mothers' and fathers' parenting stress is positively associated with hours of non-parental care, but that parenting stress is significantly reduced if the child is cared for informally or by family (Craig & Churchill, 2018). The authors argue that informal care is less rigid in terms of schedule than formal care arrangements. While that study differentiates formal and grandparental (informal) child-care, parental and mixed child-care are not considered. Another study based on the HILDA-data (Arpino & Luppi, 2020) distinguishes different combinations of paid and unpaid child-care and analyses mothers' satisfaction with work-family balance. However, that study does not differentiate different paid and unpaid child-care arrangements and does not assess how both parents' well-being is affected by different child-care arrangements. To complement the existing evidence, the present study, aims at distinguishing different child-care arrangements and includes both parents.

### Formal Child-care and Parental SWB

Formal child-care has risen high on the agenda of policymakers and researchers, particularly with a focus on

subsidized formal child-care. The main goal of policy-initiated child-care is to increase mothers' labor market participation (Herbst & Tekin, 2014; Schmitz, 2019), but also to improve children's and parents' well-being (Broekhuizen et al., 2016; Connolly & Haeck, 2015; Verhoef et al., 2016).

Several studies have focused on the relationship between child-care subsidies and parents' well-being. Overall, these studies reveal mixed evidence that differs by social class and across welfare states (Baker et al., 2008; Brodeur & Connolly, 2013; Connolly & Haeck, 2015; Herbst & Tekin, 2014; Schmitz, 2019; Schober & Schmitt, 2017). From this literature, it emerges that the relationship between formal child-care and parents' well-being is complex and heterogeneous depending on contextual as well as individual-level characteristics. A study on the relationship between women's child-care problems (e.g. related to finding employment and participating in training) and their emotional well-being has revealed a negative relationship between the two (Press et al., 2006).

### Informal Child-care

Informal care is less clearly defined than formal care (Breitkreuz & Colen, 2018; Wheelock & Jones, 2002) and reliable statistics are often difficult to obtain. Research has mostly considered grandparents who are an important source of help for their children and grandchildren. Hence, grandparental child-care represents a specific type of inter-generational support (Bordone et al., 2017; Wheelock & Jones, 2002; Yoo & Russell, 2020). Across contexts, the availability of grandparental child-care is positively related to mothers' labor market participation (Aassve et al., 2012; Arpino et al., 2014; Compton and Pollak, 2014; García-Morán & Kuehn, 2017; Gray, 2005); sometimes at the expense of grandmothers' own labor market participation (Rupert & Zanella, 2018). Grandparents can provide help in cases of non-standard working hours or emergencies when children are ill and cannot attend formal child-care. Drivers of grandparental care are trust, shared values and inter-generational feelings of responsibility (Bordone et al., 2017; Breitkreuz & Colen, 2018; Igel & Szydlik, 2011; Wheelock & Jones, 2002). Grandparental care has been shown to relate to less parenting stress (Craig & Churchill, 2018), other indicators of parents' SWB have not yet been investigated.

### Mixed Child-care

Mixed child-care describes arrangements in which children experience two or more concurrent non-parental child-care arrangements. Even more than for informal arrangements, representative data on the prevalence of mixed care are

hardly available. Mixed arrangements are also referred to as ‘patchwork’ (Morrissey, 2008, 2009; Scott et al., 2005). Often, mixed arrangements concern grandparental care that is used complementarily to formal care (Wheelock & Jones, 2002). In many cases, mixed arrangements are not a preferred choice but implemented due to constraints, such as non-availability of full-time formal child-care or irregular working hours. Some studies find that mixed arrangements are stressful for parents and harmful to family well-being (Chaudry, 2004; Scott et al., 2005; Speirs et al., 2015). On the other hand, mixed arrangements can be a strategy to combine quality aspects from different child-care arrangements and to enrich children by exposing them to multiple settings, caregivers and peer groups. Some parents use mixed arrangements to balance their care preferences with employment and other constraints (Morrissey, 2008; Pilarz & Hill, 2017). Overall, mixed arrangements are very heterogeneous and range from purposeful combinations providing supportive environments for child development to disorganized unstable, inconsistent, and stressful mixes resulting into poor child outcomes (De Schipper et al., 2004; Morrissey, 2008).

Less is known about how mixed child-care arrangements relate to parents’ SWB. Yet, mixed child-care arrangements are likely to affect parental SWB via a number of channels. Routines are more complex to establish than with a single arrangement. Moreover, mixed child-care requires the harmonization of work and child-care schedules and transportation across care providers which might contribute to work-family stress and employment instability (Chaudry, 2004; Henly & Lambert, 2005; Morrissey, 2008; Pilarz & Hill, 2014; Scott et al., 2005). There is some evidence showing that mixed arrangements relate to more parenting stress than grandparental child-care (Craig & Churchill, 2018). Arpino and Luppi’s (2020) analysis of how different combinations of paid and unpaid child-care arrangements relate to working mothers’ satisfaction with work-family balance reveals a combination of paid and unpaid child-care as the most satisfying one. This finding is explained by difficulties related to the affordability and the flexibility of paid child-care which is negatively related to mothers’ satisfaction with work-family balance. That study does not take into account other dimensions of individuals’ SWB. To shed more light thereon, our study considers multiple child-care arrangements related to a large spectrum of SWB dimensions.

### Individuals’ Subjective Well-being and Child-care Arrangements: Lack of Research

Well-being measures for parents that have been related to (formal) child-care arrangements are parenting stress,

general, mental or physical health, (maternal) depression, life satisfaction, family dysfunction, satisfaction with the relationship and satisfaction with work-family balance (Arpino & Luppi, 2020; Baker et al., 2008; Brodeur & Connolly, 2013; Craig & Churchill, 2018; Healy & Duni-fon, 2014; Herbst & Tekin, 2014; Schober & Schmitt, 2013). However, most of the studies that analyze SWB in relation to child-care arrangements cover a single dimension of SWB. Moreover, most existing studies focus on a particular child-care arrangement or compare two different arrangements such as paid or unpaid child-care arrangements. In order to draw a more complete picture, in the present research we consider a more exhaustive array of potential child-care arrangements (i.e. grandparents, relatives, formal institutions and mixed arrangements) and explore the relationship between those arrangements and the two cognitive and affective dimensions of parents’ SWB (Diener, 1984; Diener et al., 1985). Care provided by grandparents and relatives is also referred to as kith and kin care (Broad, 2007).

From a psychological perspective, SWB comprises two components (Diener, 1984; Diener et al., 1985): The first one is related to the cognitive dimension of SWB and the second to the affective dimension of SWB (Busseri & Sadava, 2011; Eid & Larsen, 2008; Luhmann et al., 2012). The cognitive dimension of SWB refers to the evaluation of life in general (i.e. general life satisfaction) and of specific life domains (i.e. satisfaction with living together; satisfaction with the division of housework). It implies a comparison of personal circumstances and a mental representation of what is thought to be an appropriate standard. The affective dimension of SWB is composed of positive and negative moods and emotions. Positive affects encompass pleasant affects like optimism and joy, while negative affects refer to subjective distress and unpleasant mood states like depressive symptoms, sadness, anger or worry (Scherer et al., 2004; Watson et al., 1988).

### Expectations Regarding the Relationship between Child-care Arrangements and Parents’ SWB

Based on the above, we analyze three research questions: (1) What child-care arrangements – parental, formal, informal or mixed – do parents make use of? (2) Is there a relationship between different child-care arrangements and parents’ cognitive and affective SWB? (3) Which child-care arrangement is the most deleterious for parents’ cognitive and affective well-being?

We investigate how and to what extent different child-care arrangements affect three components of the cognitive dimension of SWB – life satisfaction, satisfaction with living

together and the satisfaction with the way housework is shared – as well as the two affective components of the affective SWB namely individuals' positive and negative affects.

First, we take a descriptive perspective and investigate what child-care arrangement(s) parents make use of (Research Question 1). Each child-care arrangement has different implications for parents. Often, formal child-care entails considerable costs, particularly in Switzerland (Rüh et al., 2016). Moreover, formal child-care has strict schedules, which may result into conflicting scheduling demands (Craig & Powell, 2013). Informal child-care, mostly grandparents and sometimes relatives, friends, or neighbors, on the other hand, is usually free of charge and more flexible. At the same time, having the children cared for by a known person may give parents more psychological comfort, particularly, if it is the grandparents (Breitkreuz & Colen, 2018; Craig & Churchill, 2018), who tend to provide care which is in line with the parents' own values and practices (Arber & Timonen, 2012).

In comparison to parental care, informal as well as formal child-care are likely to involve time pressures. Children have to be prepared and transported and parents may worry and feel anxious about their children not being cared for by themselves (Craig & Churchill, 2018). The latter is likely to be less problematic regarding informal as compared to formal care, suggesting that parents experience higher levels of well-being if their children are cared for informally as opposed to formally (Research Question 2). Scheduling pressures are stronger with longer work hours and if mixed care types are used (Pilarz & Hill, 2017).

We expect that different child-care arrangements relate to individuals' SWB. With their strict schedules and the fact that children are taken care of by trained but unknown people, formal child-care might be negatively related to the SWB dimensions. Therefore, we expect a decrease in life satisfaction, satisfaction with living together as well as satisfaction with the way housework is shared. Formal child-care will also negatively influence the two affective components of well-being and we expect an increase in negative and a decrease in positive affect. We expect mixed child-care to impact the SWB dimensions in the same way, as it can be assumed that they imply time pressures and the necessity to combine and negotiate different child-care arrangements with different actors. Grandparental child-care implies a known environment whose values are known (even if the parents are not completely in agreement with what is transmitted) less time pressures, and more flexibility that might lead to a better overall SWB for both parents: We expect less negative affect, more positive affect and more satisfaction with life in general and with the two life domains considered in the analyses (Research Question 3). Assuming that in terms of flexibility and availability, child-care provided by relatives presents the same characteristics

as grandparental care, we expect this type to be positively related to the SWB dimensions, but to a weaker extent compared to grandparental care.

## Data, Sample and Method

Our analyses are based on a subsample of the SHP (SHP Group, 2020) a longitudinal nationally representative mainly CATI (computer assisted telephone interview) survey that, since 1999, follows four random samples of households living in Switzerland. All individuals older than 14 in private households are interviewed on a yearly basis. This CATI survey was based on a close-ended questionnaire that was translated into the three main Swiss languages (Swiss-German, Italian, and French). As other panel surveys, attrition in the SHP is associated with specific patterns of vulnerability (Rothenbühler & Voorpostel, 2016), but is not particularly selective with respect to important socio-demographic or economic variables (Lipps, 2007). The SHP data are collected by the Swiss Household Panel team based at the Swiss Centre of Expertise in the Social Sciences FORS and is financed by the Swiss National Science Foundation.

For our analyses we selected individuals who participated in at least one wave of the SHP between 2002 to 2017 (16 waves have been pooled), who have at least one preschool child aged 0 to 4 years, for whom information on the variables of interest and the partner's information is available. In total, 811 men (average age 36 years) and 882 women (average age 34 years) being in a relationship are included in the sample. Given the longitudinal nature of the SHP, we have multiple observations per participant, providing us with a total sample that consists of 1693 individuals, referring to 4441 observations. Our sample includes only individuals with complete information on themselves and their partner for all variables of interest. Table 1 presents the sample characteristics for the first year of observation.

## Dependent Variables

The aim of this study is to test how different child-care arrangements relate to a set of SWB-indicators. A first set of measures refers to the cognitive SWB (Diener et al., 1985): Two items assess the level of satisfaction with two domains of the relationship quality: The *Satisfaction with living together with other household members* is measured on a scale ranging from "0" to "10" where "0" means "not at all satisfied" and "10" means "very satisfied"; The *Satisfaction with the way housework is shared* is measured on a scale ranging from "0" to "10" where "0" means "not at all satisfied" and "10" means "very satisfied". A third item assesses the level of *Satisfaction with life in general*

measured on a scale ranging from “0” to “10” where “0” means “not at all satisfied” and “10” means “very satisfied”. The affective dimension of SWB (Watson et al., 1988) is assessed through two indicators (Scherer et al., 2004). The *Positive affects* indicator is based on two summed items (occurrence of optimism and joy). The mean is considered as the scale score where “0” means “never experiencing any positive affects” and “10” means “always experiencing positive affects”. The *Negative affects* indicator has been constructed based on four items (occurrence of depressive symptoms, degree of anger, sadness and worry). The internal homogeneity of the four items is satisfactory (Cronbach’s  $\alpha$  of 0.74 at the first observation). The four items have been summed and the mean is used as the scale score where “0” means “never experiencing any negative affects” and “10” means “always experiencing negative affects”.

### Explanatory Variable

To depict a large array of potential child-care arrangements, the SHP-dataset allows the construction of a variable that differentiates five child-care categories. The first category labeled *Parental* care includes individuals who report taking care of their child themselves. The second category comprises individuals that count exclusively on the child/ren’s *Grandparents*. The third category is called *Relatives* and includes friends, neighbors and in 11.3% of the cases the non-cohabiting parent (mother or father) as child-care providers. The fourth category comprises parents using *Formal* child-care such as kindergarten, day-mothers, childminders or nannies. As outlined above, we categorize day-mothers, childminders and nannies as formal child-care, since a legal binding contract is the basis for this type of child-care arrangement. The last category comprises parents using *Mixed* child-care, i.e. a combination of non-parental arrangements. Combinations include, for example, paid and unpaid child-care such as grandparents and formal child-care, or kindergarten plus day-mother or friends.

### Covariates

Based on theoretical considerations, several socio-demographic and control variables are included in the analysis. In order to account for possible period effects, we control for the survey-wave because the relationship between child-care type and SWB might change between 2002 and 2017; for instance, grandparent care was more common in some years compared to others and may have impacted parental SWB differently in different time periods. *Sex* is controlled for because men and women differ in terms of the SWB dimensions: Women tend to express more negative affects than men (e.g. Diener, 1984); *Age* as

it is often related to the SWB dimensions (e.g. Diener & Suh, 1998); *Marital status* because prior research points out that it correlates with the SWB dimensions (Le Goff & Ryser, 2013; Ryser & Le Goff, 2015); *Number of children* living in the household influences the degree of need for organization and stress in the household and, hence, directly impacts SWB. The *yearly individual and household income* reflect the financial resources of the individual and those of the household. Moreover, they are a proxy for potential financial investments into child-care (Bordone et al., 2017). We use the log of the imputed income variables. The *Swiss Socio-Professional Categories* (CSP-CH) are based on the occupational coding of the Swiss Federal Office of Statistics, as well as on educational achievement (Joye & Schuler, 1995). The CSP-CH is an indicator that combines individuals’ educational attainment and their occupational position. Socio-Professional Categories reflect the resources available to the individual and the household. *Time devoted to housework* assesses the weekly hours individuals spend on housework. *Workload* assesses the number of weekly hours individuals spend on paid work. It indicates the involvement in the working sphere. Prior research has shown that workhours relate to parental SWB and work schedules are a determinant of child-care arrangements (Verhoef et al., 2016). As the characteristics of both partners affect the decision for child-care arrangement information on the respondents’ partner is taken into account: The partner’s *CSP-CH*, *time devoted to housework* and the *workload*.

### Sample Characteristics

Table 1 provides descriptive statistics for each child-care arrangement based on the first year of observation (N = 1693; Observations = 4441) and grants important insights concerning the socio-demographic profiles of parents who chose the different child-care arrangements. The five groups differ in several important characteristics. An ANOVA reveals that the age between the different child-care groups differs statistically [ $F(4,1688) = 17.267$ ,  $p = 0.000$ ]. Parents in the *Formal* and in the *Parental* group are somewhat older than those in the other groups. A large majority of parents in all groups is married, yet there are significant differences (Chi square = 20.028,  $p = 0.000$ ,  $df = 4$ ): The proportion of married individuals is higher for the *Parental*, *Grand-parental* and *Relatives* child-care groups. Concerning the CSP-CH, the largest proportions of respondents and their partners in the *Parental*, *Formal* and *Mixed* groups work in academic professions and senior management (Chi square = 58.053,  $p = 0.000$ ,  $df = 4$ ). The largest proportion of the *Grandparents* and *Relatives* group works in intermediate occupations (Chi square = 18,761,  $p = 0.001$ ,  $df = 4$ ). The highest income at the individual

[ $F(4,1688) = 8.868, p = 0.000$ ] and the household level [ $F(4,1688) = 19.974, p = 0.000$ ] is found in the *Parental* and the *Mixed* group. It is lowest in the *Grandparental* group. Statistical differences concerning how much time respondents spend on paid work are observed across groups [ $F(4,1688) = 3.953, p = 0.003$ ]. Individuals in the *Parental*, the *Formal* and the *Mixed* group tend to spend more hours on paid work than those in the other groups. Time devoted to housework also differs statistically [ $F(4,1688) = 3.128, p = 0.014$ ]: It is somewhat lower in the *Parental* and the *Formal* group than in the other groups. For respondents' partners we observe a similar pattern.

The distribution of the different SWB dimensions differs statistically significantly across groups. Satisfaction with life in general is highest for the *Parental* and *Grandparental* group [ $F(4,1688) = 6.099, p = 0.000$ ]. Positive affects differ barely across groups [ $F(4,1688) = 2.170, p = 0.070$ ]; they tend to be highest in the *Grandparental* group. Negative affects are highest in the *Mixed* and lowest in the *Grandparental* group [ $F(4,1688) = 8.504, p = 0.018$ ]. The relationship quality dimensions are similar across groups. This also holds for satisfaction with living together and the level of satisfaction with the way housework is shared as revealed by the non-significant ANOVA (not reported in Table 1).

On average, children spend around 18 hours in non-parental child-care: 13 hours when child-care is provided by *Relatives*, and 24 when parents rely on *Mixed* arrangements. The costs for *Formal* child-care depend on several factors such as the number of hours in child-care, the number of children and whether parents rely on publicly subsidized child-care (i.e. the cost is adjusted to the household income) or non-subsidized child-care (with the cost fixed independently of the household income) and the area of living. For *Formal* child-care parents spend on average 760 CHF per month which corresponds to around 7% of the average household income of our sample; however, this amounts up to 2600 CHF per month and child. Parents relying on a day-mother (categorized as formal child-care) who comes to their home spend around 4000 CHF (social charges excluded). The majority of individuals relying on *Relatives* do not pay them, or only symbolically. Descriptive analyses reveal that the higher the number of children in the household, the less parents tend to rely on *Formal* care. Finally, descriptive analyses show that the majority of parents using *Mixed* child-care use *Formal* child-care plus *Grandparents* or *Relatives*. Parents combine up to four child-care arrangements.

### Analytical Strategy

The aim of our study is to shed light on the extent to which different child-care arrangements affect multiple dimensions

of parents' SWB. In order to increase the sample size, we pooled the 16 waves of the SHP annual data from 2002 to 2017. Each individual has as many records as the number of waves they participated in (therefore, it is crucial to control for the survey-wave). To account for the dependence between the observations that are nested within an individual, we use multilevel models (Hox, 2002; Singer & Willett, 2003). Hierarchical linear modeling (HLM) is an extension of the ordinary regression accounting for the hierarchical structure of the data. It allows the number of measurements to vary between participants and considers the clusters of observations that are not independent from one another and that residuals are correlated. Multilevel models allow assuming that intercepts vary across individuals; hence, they are referred to as random-intercept models. Such models control for unobserved heterogeneity between individuals and, therefore, resolve endogeneity issues. (Hox, 2002; Singer & Willett, 2003). In all models, *Grandparental* care is the reference group to which the other care-arrangements are compared. This choice has been made because *Grandparental* care is the most common child-care arrangement in the sample (see Table 1).

## Results

### Descriptive Results

First, we focus on research question 1 and describe the distribution across the five child-care arrangements. Table 1 displays the situation for the first year of observation. 8% of the respondents rely on *Parental* child-care arrangement while 82% rely on either of the four non-parental child-care arrangements: The most popular child-care arrangement is *Grandparental* child-care with almost a third of the parents using grandparents as the only child-care provider. *Formal* child-care ranks second, with around a fifth of the respondents using this. With around a sixth of the parents using *Relatives* or *Mixed* child-care arrangements these are about equally popular, but less frequently used than the other options. For comparability, we also analyzed the descriptive situation for all the observed years; the patterns are similar over the years.

### The Relationship between Child-care Arrangements and SWB Dimensions

To answer research question 2 and 3, we focus on the results from the multilevel models assessing the relationship between different child-care arrangements and both parents' SWB. In all models, *Grandparental* child-care is the reference category because this is the largest one. Table 2 presents the results for the influence of different child-care

**Table 1** Description of child-care arrangements along socio-demographic variables (percentages).

|  | Parental<br>child-care | Grandparents | Relatives | Formal<br>child-care | Mixed<br>child-care | ANOVA/<br>Chi-square |
|--|------------------------|--------------|-----------|----------------------|---------------------|----------------------|
| <i>N</i>   | 305                    | 531          | 257       | 365                  | 235                 |                      |
|  | 18 %                   | 31.4 %       | 15.2 %    | 21.6 %               | 13.9 %              |                      |
| Age: Mean  | 36.49                  | 34.12        | 34.44     | 36.61                | 35.35               | ***                  |
| <i>SD</i>  | 5.12                   | 4.79         | 5.44      | 6.23                 | 5.23                |                      |
| Sex: women %                                     | 51.8                   | 52.5         | 52.9      | 50.7                 | 52.8                |                      |
| Weekly hours child-care                          |                        | 15 h         | 13 h      | 20 h                 | 24 h                |                      |
| <i>SWB dimensions</i>                            |                        |              |           |                      |                     |                      |
| Satisfaction with life                           | 8.38                   | 8.33         | 8.29      | 7.99                 | 8.21                | ***                  |
| <i>SD</i>  | 1.13                   | 1.10         | 1.22      | 1.27                 | 1.19                |                      |
| Positive affects                                 | 7.53                   | 7.63         | 7.46      | 7.45                 | 7.36                | +                    |
| <i>SD</i>  | 1.31                   | 1.24         | 1.31      | 1.36                 | 1.37                |                      |
| Negative affects                                 | 2.50                   | 2.46         | 2.50      | 2.70                 | 2.85                | *                    |
| <i>SD</i>  | 1.68                   | 1.63         | 1.75      | 1.75                 | 1.64                |                      |
| <i>Relationship quality dimensions</i>           |                        |              |           |                      |                     |                      |
| Satisfaction with living<br>together             | 8.67                   | 8.75         | 8.59      | 8.52                 | 8.61                | ns                   |
| <i>SD</i>  | 1.38                   | 1.23         | 1.34      | 1.30                 | 1.54                |                      |
| Satisfaction with the way<br>housework is shared | 8.10                   | 8.15         | 8.05      | 7.84                 | 8.03                | ns                   |
| <i>SD</i>  | 1.88                   | 1.79         | 1.87      | 1.94                 | 1.75                |                      |
| <i>Number of weekly hours dedicated to...</i>    |                        |              |           |                      |                     |                      |
| Paid work  | 32.28                  | 29.44        | 28.33     | 32.49                | 32.03               | **                   |
| <i>SD</i>  | 19.97                  | 16.76        | 18.24     | 15.19                | 15.11               |                      |
| Housework  | 10.99                  | 12.01        | 13.21     | 10.62                | 11.19               | *                    |
| <i>SD</i>  | 10.10                  | 10.04        | 12.21     | 8.13                 | 9.84                |                      |
| <i>Marital status %</i>                          |                        |              |           |                      |                     |                      |
| Single, separated<br>or widow                    | 12.1                   | 14.5         | 11.7      | 20.5                 | 22.1                |                      |
| Married, registered<br>partnership               | 87.9                   | 85.5         | 88.3      | 79.5                 | 77.9                | ***                  |
| <i>Swiss socio-professional category %</i>       |                        |              |           |                      |                     |                      |
| Top management                                   | 1.0                    | 0.0          | 0.8       | 1.6                  | 2.1                 | *                    |
| Liberal occupations                              | 2.0                    | 0.9          | 1.2       | 3.3                  | 3.4                 | +                    |
| Other self-employed                              | 12.1                   | 9.6          | 7.0       | 6.6                  | 3.8                 | **                   |
| Academic professions and<br>senior management    | 34.4                   | 17.1         | 14.8      | 28.2                 | 33.6                | ***                  |
| Intermediate occupations                         | 21.0                   | 32.4         | 34.2      | 27.7                 | 24.3                | ***                  |
| Qualified non-manual<br>occupations              | 7.9                    | 19.8         | 16.7      | 13.7                 | 13.2                | ***                  |
| Qualified manual<br>occupations                  | 1.0                    | 6.0          | 5.4       | 4.9                  | 6.0                 | *                    |
| Unqualified manual<br>occupations                | 0.7                    | 2.6          | 3.1       | 2.5                  | 1.7                 | ns                   |
| <i>Partner information</i>                       |                        |              |           |                      |                     |                      |
| <i>Swiss socio-professional category %</i>       |                        |              |           |                      |                     |                      |
| Top management                                   | 0.7                    | 0.2          | 0.8       | 1.1                  | 1.7                 | ns                   |
| Liberal occupations                              | 1.6                    | 0.8          | 1.2       | 3.3                  | 2.6                 | +                    |



**Table 1** (continued)

|  | Parental child-care | Grandparents | Relatives | Formal child-care | Mixed child-care | ANOVA/ Chi-square |
|--|---------------------|--------------|-----------|-------------------|------------------|-------------------|
| Other self-employed                                | 10.5                | 7.5          | 5.8       | 4.7               | 2.6              | **                |
| Academic professions and senior management         | 28.2                | 14.7         | 13.2      | 23.6              | 30.2             | ***               |
| Intermediate occupations                           | 18.7                | 26.4         | 26.5      | 23.3              | 17.0             | *                 |
| Qualified non-manual occupations                   | 6.2                 | 13.6         | 14.0      | 10.7              | 11.9             | *                 |
| Qualified manual occupations                       | 0.7                 | 5.1          | 4.3       | 2.2               | 3.0              | **                |
| Unqualified manual occupations                     | 0.0                 | 2.1          | 2.7       | 2.2               | 1.3              | +                 |
| <i>Number of hours the partner dedicates to...</i> |                     |              |           |                   |                  |                   |
| Paid work  | 38.42               | 32.24        | 33.07     | 34.66             | 34.58            | ***               |
| <i>SD</i>  | 16.33               | 15.88        | 16.63     | 13.79             | 12.89            |                   |
| Housework  | 10.90               | 11.79        | 12.16     | 10.62             | 10.99            | ns                |
| <i>SD</i>  | 9.3                 | 9.98         | 11.39     | 8.44              | 9.88             |                   |
| <i>Yearly Income (CHF)</i>                         |                     |              |           |                   |                  |                   |
| Individual income                                  | 79'507              | 52'999       | 55'654    | 68'989            | 76'307           | ***               |
| <i>SD</i>  | 86'037              | 35'963       | 45'996    | 56'513            | 14'3612          |                   |
| Household income                                   | 158'383             | 103'893      | 111'540   | 132'533           | 149'525          | ***               |
| <i>SD</i>  | 127'548             | 34'284       | 51'334    | 60'396            | 127'379          |                   |

Mean and standard deviation (*SD*) for the continuous variables at the first interview

Source: SHP; own calculations; N = 1693; Observations = 4441

According to the Federal Statistical Office (2021), in 2019 the average disposable household income in Switzerland is 6609 CHF per month  
*ns* non-significant

+ $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

arrangements on the two SWB components referring to the relationship quality dimensions, namely the satisfaction with living together with other household members and the satisfaction with the way housework is shared. Individuals who use *Relatives* ( $\beta = -0.117$ ,  $p = 0.043$ ) or *Formal* child-care tend to be less satisfied with living together ( $\beta = -0.171$ ,  $p = 0.003$ ) than individuals with *Grandparental* care.

The second relationship quality dimension is the satisfaction with how the housework is shared. Individuals who make use of *Relatives* ( $\beta = -0.160$ ,  $p = 0.037$ ), *Formal* ( $\beta = -0.211$ ,  $p = 0.008$ ) or *Mixed* child-care ( $\beta = -0.165$ ,  $p = 0.027$ ) tend to be less satisfied with the way housework is shared compared to individuals relying on *Grandparental* child-care.

Table 3 shows the results for the general cognitive dimensions of SWB, satisfaction with life in general, and the two affective dimensions of SWB, namely the positive and negative affect. Focusing on the satisfaction with life in general dimension, making use of *Formal* ( $\beta = -0.167$ ,  $p = 0.002$ ) as well as *Mixed* child-care ( $\beta = -0.115$ ,  $p = 0.024$ ) negatively relates to satisfaction with life in general compared to the use of *Grandparental* child-care.

Different child-care arrangements do not predict the well-being dimension of the negative affects. This finding is opposed to those for the other SWB dimensions. Finally, Table 3 describes the results related to the positive affects. Different child-care arrangements impact the positive affects: Making use of *Relatives* ( $\beta = -0.132$ ,  $p = 0.022$ ), *Formal* ( $\beta = -0.114$ ,  $p = 0.052$ ) and *Mixed* ( $\beta = -0.111$ ,  $p = 0.053$ ) child-care arrangements relates to a decrease in the level of positive affects compared to the use of *Grandparental* child-care.

### Sensitivity Analyses

Additional analyses to test the robustness of our findings have been carried out. First, we considered configurations where day-mother/nanny/childminder are a separate category and not included in the *Formal* child-care category. The underlying assumption is that day-mother/nanny/childminder arrangements differ from formal child-care arrangement in their set-up and organization. The results are similar to those presented above. Second, we added some interactions: Based on the theoretical background one may

**Table 2** Results for the multilevel models estimating the relationship between child-care arrangements and the couple dimensions of both parents' SWB

| Parameters  | Satisfaction with living together |       |       | Satisfaction with way housework is shared |       |       |
|---|-----------------------------------|-------|-------|---|-------|-------|
|   | Estimation                        | SE    | Sig.  | Estimation                                | SE    | Sig.  |
| Intercept   | 9.328                             | 0.813 | 0.000 | 10.638                                    | 1.085 | 0.000 |
| Wave  | −0.009                            | 0.005 | 0.087 | −0.006                                    | 0.007 | 0.365 |
| Age   | −0.027                            | 0.006 | 0.000 | −0.017                                    | 0.008 | 0.034 |
| Sex: ref. Women   | −0.167                            | 0.094 | 0.077 | −0.764                                    | 0.126 | 0.000 |
| Married   | 0.232                             | 0.079 | 0.003 | 0.143                                     | 0.105 | 0.173 |
| Number of children  | −0.115                            | 0.031 | 0.000 | −0.019                                    | 0.041 | 0.636 |
| <i>Income</i>   |                                   |       |       |   |       |       |
| Individual  | −0.008                            | 0.013 | 0.528 | −0.020                                    | 0.017 | 0.250 |
| Household   | 0.062                             | 0.074 | 0.403 | −0.048                                    | 0.099 | 0.629 |
| Time for housework  | 0.002                             | 0.003 | 0.443 | −0.003                                    | 0.004 | 0.350 |
| Time for paid work  | 0.003                             | 0.002 | 0.216 | 0.003                                     | 0.003 | 0.321 |
| <i>Socioprofessional category: ref. intermediate profession</i>           |                                   |       |       |   |       |       |
| Top manager   | −0.415                            | 0.212 | 0.050 | 0.161                                     | 0.282 | 0.568 |
| Liberal occupations   | −0.053                            | 0.165 | 0.746 | 0.422                                     | 0.220 | 0.055 |
| Self-employed   | −0.019                            | 0.097 | 0.844 | −0.033                                    | 0.129 | 0.801 |
| Academic profession   | −0.098                            | 0.066 | 0.137 | −0.081                                    | 0.088 | 0.360 |
| Qualified non manual occupations  | −0.111                            | 0.082 | 0.176 | −0.055                                    | 0.109 | 0.615 |
| Qualified manual occupations  | −0.051                            | 0.138 | 0.710 | 0.151                                     | 0.184 | 0.412 |
| Unqualified manual occupations  | 0.343                             | 0.189 | 0.069 | −0.455                                    | 0.252 | 0.071 |
| No professional activity  | −0.154                            | 0.086 | 0.074 | 0.128                                     | 0.115 | 0.266 |
| <i>Partner's information</i>  |                                   |       |       |   |       |       |
| Time for housework  | 0.000                             | 0.003 | 0.942 | −0.002                                    | 0.004 | 0.637 |
| Time for paid work  | −0.001                            | 0.002 | 0.550 | 0.000                                     | 0.003 | 0.911 |
| <i>Partner's Socioprofessional category: ref. intermediate profession</i> |                                   |       |       |   |       |       |
| Top manager   | −0.417                            | 0.212 | 0.049 | −0.183                                    | 0.282 | 0.516 |
| Liberal occupations   | −0.113                            | 0.165 | 0.493 | −0.235                                    | 0.220 | 0.285 |
| Self-employed   | 0.027                             | 0.097 | 0.779 | 0.249                                     | 0.129 | 0.054 |
| Academic profession   | −0.082                            | 0.066 | 0.212 | −0.123                                    | 0.088 | 0.163 |
| Qualified non manual occupations  | −0.073                            | 0.082 | 0.374 | −0.057                                    | 0.109 | 0.600 |
| Qualified manual occupations  | 0.093                             | 0.139 | 0.504 | 0.070                                     | 0.185 | 0.705 |
| Unqualified manual occupations  | 0.177                             | 0.188 | 0.346 | −0.017                                    | 0.250 | 0.945 |
| No professional activity  | −0.064                            | 0.082 | 0.431 | −0.050                                    | 0.109 | 0.642 |
| <i>Child-care Arrangements: ref. Grandparents</i>                         |                                   |       |       |   |       |       |
| Parental  | 0.045                             | 0.060 | 0.455 | −0.061                                    | 0.080 | 0.444 |
| Relatives   | −0.117                            | 0.058 | 0.043 | −0.160                                    | 0.077 | 0.037 |
| Formal  | −0.171                            | 0.059 | 0.004 | −0.211                                    | 0.079 | 0.008 |
| Mixed   | −0.082                            | 0.056 | 0.143 | −0.165                                    | 0.075 | 0.027 |

Source: SHP; own calculations; N = 1693; Observations = 4441

SE Standard Error

assume that the effect of child-care on the SWB dimensions changes depending on respondents' sex. Therefore, we interacted each child-care arrangement with sex. These interactions were not statistically significant and, in addition, the results remained as in the main analyses. When running the analyses separately by sex, the results become more pronounced for women. One may also assume that

attitudes towards gender equality in the couple mediate or moderate the effect of child-care arrangement on the SWB dimensions. Third, we have tested this and our results demonstrate that attitudes towards gender equality are not statistically significantly related to the different SWB dimensions and do not mediate or moderate this relationship. The results remained the same as those in the main

analysis. These checks confirm the robustness of the above-described results.

### Observations on Socio-demographic Characteristics

In addition to the main results, Tables 2 and 3 also yield some valuable insights concerning the relationship between the SWB dimensions and individuals' socio-demographic characteristics. The older individuals are, the less satisfied they are with the relationship with the household members. Women tend to be less satisfied with living together than men. A higher number of children is related to reduced levels of satisfaction with living together. Compared to individuals with intermediate occupations, top managers tend to be less satisfied with living together (Table 2). Women and older individuals are less satisfied with how housework is shared. Individuals with a liberal occupation tend to be more satisfied with the way housework is shared, while those with an unqualified manual occupation tend to be less satisfied (Table 2).

Compared to their younger counterparts, older individuals are less satisfied with life in general. Women tend to express lower levels of life satisfaction than men. The higher the household income the higher is the satisfaction with life. The more time individuals dedicate to paid work, the less satisfied they are. Self-employment increases satisfaction with life in general; while individuals in unqualified manual occupations express lower levels. Individuals with a partner with an unqualified manual occupation also express lower levels of life satisfaction (Table 3). The older individuals are the more negative affects they express; women tend to express more negative affects than men and married individuals express less negative affects compared to unmarried individuals. The higher the household income the fewer negative affects individuals express; the more time is dedicated to the housework the less negative affects individuals declare. Individuals with qualified manual occupations as well as those with unqualified manual occupations tend to express more negative affects than those in intermediate occupations (i.e. technical and occupations; wage earners) (Table 3). Finally, the older individuals are the fewer positive affects they declare; women tend to express fewer positive affects than men. The socio-professional dimensions do not influence this dimension (Table 3).

### Discussion

Based on pooled data from 16 waves (2002–2017) of the SHP (SHP Group, 2020), this study has investigated (1) what child-care patterns – parental care, informal and formal as well as mixed arrangements – parents of 0–4 years-old children make use of; (2) how these child-care

arrangements relate to a vast spectrum of both parents' subjective well-being dimensions (SWB; e.g. Diener, 1984); namely, the satisfaction with living together with other household members, the satisfaction with how housework is shared, the satisfaction with life in general and the two affective components of the SWB – the positive (optimism and joy) and negative affects (depressive symptoms, anger, sadness and worry); and (3) which child-care arrangement is the most deleterious for both parents' SWB. These questions have been analyzed with a focus on Switzerland, characterized by a 'modernized traditional family model' (Levy & Widmer, 2013), with low state support for work-family reconciliation (Lundberg et al., 2008; Matysiak & Węziak-Białowolska, 2016) similar to the US and where the one-and-a-half earner model is common. Switzerland remains a country where inequalities between men and women in terms of occupational participation remain strong.

Several conclusions regarding both parents' SWB can be drawn from the above analyses. Overall, in line with previous research, the child-care arrangement is statistically related to different dimensions of SWB in heterogeneous ways (Arpino & Luppi, 2020; Baker et al., 2008; Brodeur & Connolly, 2013; Healy & Dunifon, 2014; Herbst & Tekin, 2014; Schober & Schmitt, 2013). A major strength of our analysis is that it extends this literature by taking into account a large array of potential child-care arrangements and their relationship with a large spectrum of both parents' SWB dimensions. Our study adds to the one of Craig and Churchill (2018) who have shown that both mothers' and fathers' parenting stress is positively associated with hours of non-parental care, but that for both sexes parenting stress is reduced significantly if the child is cared for informally or by family.

Our research clearly demonstrates that the type of child-care parents make use of relates to most of the SWB dimensions: The cognitive dimensions of SWB are negatively influenced by formal as well as mixed child-care arrangements. Compared to grandparental child-care making use of relatives and formal child-care arrangements negatively influences satisfaction with living together. Individuals who rely on relatives or use formal and mixed child-care arrangements tend to be less satisfied with the division of housework compared to individuals who rely on grandparental child-care. In addition, individuals who rely on formal or mixed child-care express lower levels of satisfaction with life in general compared to individuals who rely on grandparental child-care.

Prior research revealed an increase in stress with formal child-care use (Craig & Churchill, 2018), this led to a hypothesis of increased negative affect for formal child-care. However, our results do not support this and we find that child-care arrangements do not influence individuals' level of negative affects. Finally, using relatives, formal or

**Table 3** Multilevel results estimating the relationship between child-care arrangements and satisfaction with life in general and the affective components of both parents' subjective well-being (SWB)

| Parameters  | Satisfaction with life in general |       |       | Negative affects |       |       | Positive affects |       |       |
|---|-----------------------------------|-------|-------|------------------|-------|-------|------------------|-------|-------|
|   | Estimation                        | SE    | Sig.  | Estimation       | SE    | Sig.  | Estimation       | SE    | Sig.  |
| Intercept   | 5.955                             | 0.708 | 0.000 | 2.351            | 0.962 | 0.015 | 7.453            | 0.783 | 0.000 |
| Wave  | 0.003                             | 0.004 | 0.509 | 0.064            | 0.006 | 0.000 | −0.003           | 0.005 | 0.608 |
| Age   | −0.037                            | 0.005 | 0.000 | 0.037            | 0.007 | 0.000 | −0.025           | 0.006 | 0.000 |
| Sex: ref. Women   | −0.149                            | 0.080 | 0.062 | 0.640            | 0.113 | 0.000 | −0.292           | 0.089 | 0.001 |
| Married   | 0.089                             | 0.067 | 0.186 | −0.211           | 0.094 | 0.025 | 0.057            | 0.075 | 0.446 |
| Number of children  | 0.015                             | 0.027 | 0.581 | −0.006           | 0.036 | 0.876 | −0.005           | 0.029 | 0.871 |
| <i>Income</i>   |                                   |       |       |                  |       |       |                  |       |       |
| Individual  | −0.009                            | 0.011 | 0.407 | −0.013           | 0.015 | 0.392 | 0.012            | 0.012 | 0.348 |
| Household   | 0.333                             | 0.065 | 0.000 | −0.192           | 0.087 | 0.028 | 0.096            | 0.071 | 0.179 |
| Time for housework  | −0.001                            | 0.002 | 0.648 | −0.007           | 0.003 | 0.036 | 0.002            | 0.003 | 0.506 |
| Time for paid work  | −0.004                            | 0.002 | 0.018 | −0.003           | 0.002 | 0.251 | 0.001            | 0.002 | 0.723 |
| <i>Socioprofessional category: ref. intermediate profession</i>           |                                   |       |       |                  |       |       |                  |       |       |
| Top manager   | −0.098                            | 0.187 | 0.602 | 0.287            | 0.248 | 0.246 | −0.215           | 0.206 | 0.297 |
| Liberal occupations   | 0.052                             | 0.143 | 0.716 | 0.172            | 0.195 | 0.377 | −0.244           | 0.159 | 0.123 |
| Self-employed   | 0.231                             | 0.085 | 0.007 | −0.209           | 0.114 | 0.068 | 0.138            | 0.094 | 0.141 |
| Academic profession   | −0.010                            | 0.058 | 0.862 | −0.007           | 0.078 | 0.930 | 0.053            | 0.064 | 0.408 |
| Qualified non manual occupations  | −0.002                            | 0.072 | 0.983 | 0.039            | 0.097 | 0.689 | −0.069           | 0.079 | 0.385 |
| Qualified manual occupations  | 0.127                             | 0.119 | 0.283 | 0.331            | 0.164 | 0.044 | 0.145            | 0.131 | 0.271 |
| Unqualified manual occupations  | −0.371                            | 0.164 | 0.024 | 0.554            | 0.224 | 0.013 | −0.041           | 0.181 | 0.823 |
| No professional activity  | −0.091                            | 0.076 | 0.230 | −0.065           | 0.101 | 0.523 | 0.013            | 0.084 | 0.875 |
| <i>Partner's information</i>  |                                   |       |       |                  |       |       |                  |       |       |
| Time for housework  | 0.001                             | 0.002 | 0.533 | −0.005           | 0.003 | 0.128 | −0.002           | 0.003 | 0.559 |
| Time for paid work  | 0.001                             | 0.002 | 0.751 | 0.001            | 0.002 | 0.718 | 0.003            | 0.002 | 0.095 |
| <i>Partner's Socioprofessional category: ref. intermediate profession</i> |                                   |       |       |                  |       |       |                  |       |       |
| Top manager   | −0.302                            | 0.187 | 0.107 | −0.031           | 0.248 | 0.902 | −0.139           | 0.206 | 0.502 |
| Liberal occupations   | −0.109                            | 0.143 | 0.449 | 0.048            | 0.195 | 0.807 | −0.192           | 0.158 | 0.226 |
| <i>Continued</i>  |                                   |       |       |                  |       |       |                  |       |       |
| Self-employed   | 0.076                             | 0.085 | 0.374 | −0.093           | 0.114 | 0.414 | −0.011           | 0.094 | 0.911 |
| Academic profession   | 0.015                             | 0.058 | 0.791 | 0.095            | 0.078 | 0.226 | −0.035           | 0.064 | 0.584 |
| Qualified non manual occupations  | 0.008                             | 0.071 | 0.908 | −0.001           | 0.097 | 0.993 | 0.000            | 0.079 | 0.999 |
| Qualified manual occupations  | 0.080                             | 0.119 | 0.501 | 0.155            | 0.165 | 0.347 | 0.152            | 0.132 | 0.250 |
| Unqualified manual occupations  | −0.327                            | 0.163 | 0.045 | 0.071            | 0.222 | 0.748 | 0.255            | 0.181 | 0.158 |
| No occupational activity  | 0.049                             | 0.072 | 0.500 | −0.006           | 0.096 | 0.951 | 0.038            | 0.079 | 0.628 |
| <i>Child-care Arrangements: ref. Grandparents</i>                         |                                   |       |       |                  |       |       |                  |       |       |
| Parental  | −0.048                            | 0.054 | 0.377 | 0.062            | 0.070 | 0.377 | −0.038           | 0.059 | 0.522 |
| Relatives   | −0.003                            | 0.053 | 0.957 | 0.020            | 0.067 | 0.765 | −0.132           | 0.057 | 0.022 |
| Formal  | −0.167                            | 0.053 | 0.002 | 0.033            | 0.069 | 0.634 | −0.114           | 0.059 | 0.052 |
| Mixed   | −0.115                            | 0.051 | 0.024 | 0.088            | 0.065 | 0.176 | −0.111           | 0.056 | 0.045 |

Source: SHP; own calculations; N = 1693; Observations = 4441

SE Standard Error

mixed child-care arrangements influences the positive affects. Individuals using these child-care arrangements express lower levels of positive affects.

Overall, according to Craig and Churchill (2018) parents with grandparental care experience less stress than others. Our results point in the same direction: Grandparental child-care is positively linked with the SWB dimensions analyzed here. A major explanation is the higher degree of flexibility of informal compared to formal child-care. The flexibility of grandparental child-care seems to play a key role leading to a better parental quality of life. However, using one's own parents to care for grandchildren might also be based on a system of reciprocal exchange in highly cohesive and mutually supportive family systems. Such reciprocal systems tend to produce both greater SWB among their members and a higher likelihood of grandparents providing child-care.

Several factors might explain why parents rely on grandparental child-care arrangements and why this can relieve parents. First, grandparents are crucial in making up for the lack of subsidized child-care facilities in the Swiss context and for many parents having their own parents taking care of the child is the only possible solution. The high cost of child-care structures as well as the lack of subsidized child-care structures should not translate into a (perceived) duty of grandparents. Therefore, grandparents should be considered as important stakeholders in policy-making. Second, grandparental child-care is attractive when considering the costs of public (i.e. subsidized) as well as private (non-subsidized) formal child-care, which in the Swiss context, represent a major proportion of household spending. This highly problematic for lower income households. Therefore, more and higher subsidized child-care places should be made available. However, another key issue concerns both partners' norms and values regarding child-care. In Switzerland, mothers of young children face strong normative pressures to reduce their working hours or to stay home and take care of their children particularly when they are young (Kuhn & Ravazzini, 2018). Women's involvement in the paid labor market is advocated as long as there are no young children in the household (Bornatici et al., 2020). Thus, relying on grandparental child-care is based on economic considerations and higher flexibility compared to formal child-care. However, it also relates to gender norms and attitudes, and representations of the family and gender roles as well as intergenerational expectations within families. In this sense, grandparenting on a regular basis is likely to be linked with traditional family values. Furthermore, grandparental child-care also relates to parents' willingness to control the nature of the norms and values that are transmitted to their children (Breitkreuz & Colen, 2018; Wheelock & Jones, 2002).

Future research should shed more light on the implications of providing child-care for grandparents. There is a

need for assessments of grandparents' contribution to child-care in terms of cost as well as the impact of child-care provision on grandparents' quality of life. While grandparental child-care benefits parents, researchers, policy-makers and practitioners need to better understand grandparents' motives to provide care; for example, it should be assessed if it is provided due to a (perceived intergenerational) obligation. Similarly, research needs to shed more light on how providing child-care affects grandparents' quality of life, labor market and social participation as well as their mental and physical health. In many cases, grandparental child-care has important consequences on their economic as well as social participation. If grandparents, and especially grandmothers, reduce their involvement in the active labor market or their social network, this can have long-term consequences on their pensions and quality of life. These policy-relevant issues are crucial avenues for future research.

Despite its contributions, some caveats with respect to the present research should be noted. Information on distance between home, work and child-care is not available in the SHP, so that we cannot account for potential burdens of transportation, assuming that a longer travel distance is related to a decrease in SWB. Likewise, there is no information on the quality of the relationship between parents and grandparents. This could play a key role in the decision to opt for grandparental child-care or relatives. In addition, with the SHP-data it is impossible to distinguish whether individuals rely on subsidized or non-subsidized formal child-care. We also acknowledge that parents' decision for a child-care arrangement is not an independent choice but it depends on a number of factors, such as availability of child-care places, labor force status of the grandparents as well as parental norms and preferences. However, this information is not available in the data. Therefore, future surveys should better target these questions and future studies should analyze these mechanisms in more detail.

Our results support initiatives towards practical measures at different levels. First of all, the flexibility of grandparental care seems to be key factor. Therefore, a recommendation for practice is to offer more flexible and family-friendly child-care schedules, as well as flexibility in the workplace. As the high financial burden of formal child-care is problematic for many families, high-quality child-care should be guaranteed and subsidized. Similarly, more social and financial incentives for fathers to take parental leaves and work part-time could facilitate the promotion of formal child-care arrangements for parents. However, financial incentives are likely to have little impact on the traditional family attitudes that prevail in the Swiss context. Therefore, nationally binding policies should promote gender equality in the private and public sphere to deconstruct the unequal norms for men and women.

Subsidized day-care structures should be implemented in regions where there is a lack. In these contexts, social work, parental associations, federal and local policy as well as, community leaders and directors of educational institutions should work together to identify and assess local parents' needs. Taking into account the local situation and labor market structures is crucial to implement day-care structures that correspond to parents' needs and preferences.

From a life course perspective, this study emphasizes the problematic and competitive pressures linked with the midlife period and the difficulty to combine work and family (Fioretta & Rossier, 2018; Perry-Jenkins & Gerstel, 2020), especially for women. In times of labor shortage, women are needed on the labor market. From a societal perspective, it is extremely costly to not offer women the flexibility to balance work and family. Thus, the promotion of social policies aimed at a better accessibility and more affordable child-care structures in the Swiss context should promote better equality between men and women and better a balance between the work and family spheres. Further research should also shed more light on how these stressful periods impact young children's well-being and development.

**Acknowledgements** This study has been realized using the data collected by the Swiss Household Panel (SHP), which is based at the Swiss Centre of Expertise in the Social Sciences FORS. The project is supported by the Swiss National Science Foundation.

**Funding** Open access funding provided by University of Lausanne.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare no competing interests.

**Publisher's note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

## References

Aassve, A., Arpino, B., & Goisis, A. (2012). Grandparenting and mothers' labour force participation: a comparative analysis using the generations and gender survey. *Demographic Research*, 27, 53–83. <https://doi.org/10.4054/DemRes.2012.27.3>.

- Ansari, A., Pianta, R. C., Whittaker, J. E., Vitiello, V. & Ruzek, E. (2021). Enrollment in public-prekindergarten and school readiness skills at kindergarten entry: differential associations by home language, income, and program characteristics. *Early Childhood Research Quarterly*, 54, 60–71. <https://doi.org/10.1016/j.ecresq.2020.07.011>.
- Arber, S., & Timonen, V. (2012). *Contemporary grandparenting: Changing family relationships in global contexts*. Policy Press.
- Arpino, B., & Luppi, F. (2020). Childcare arrangements and working mothers' satisfaction with work–family balance. *Demographic Research*, 42(19), 549–588. <https://www.demographic-research.org/volumes/vol42/19/42-19.pdf>.
- Arpino, B., Pronzato, C. D., & Tavares, L. P. (2014). The effect of grandparental support on mothers' labour market participation: an instrumental variable approach. *European Journal of Population/Revue européenne de Démographie*, 30(4), 369–390. <https://doi.org/10.1007/s10680-014-9319-8>.
- Baker, M., Gruber, J., & Milligan, K. (2008). Universal child care, maternal labor supply, and family well-being. *Journal of Political Economy*, 116(4), 709–745. <https://doi.org/10.1086/591908>.
- Bernal, R., & Keane, M. P. (2011). Child care choices and children's cognitive achievement: the case of single mothers. *Journal of Labor Economics*, 29(3), 459–512. <https://doi.org/10.1086/659343>.
- Bordone, V., Arpino, B., & Aassve, A. (2017). Patterns of grandparental child care across Europe: the role of the policy context and working mothers' need. *Ageing and Society*, 37(4), 845–873. <https://doi.org/10.1017/S0144686X1600009X>.
- Bornatici, C., Gauthier, J.-A., & Le Goff, J.-M. (2020). Changing attitudes towards gender equality in Switzerland (2000–2017): period, cohort and life-course effects. *Swiss Journal of Sociology*, 46(3), 559–585. <https://doi.org/10.2478/sjs-2020-0027>.
- Breitkreuz, R. & Colen, K. (2018). Who cares? Motivations for unregulated child care use. *Journal of Family Issues*, 39(17), 4066–4088. <https://doi.org/10.1177/0192513X18806025>.
- Broad, B. (2007). Kinship care: what works? Who cares? *Social Work and Social Sciences Review*, 13(1), 59–74. <https://doi.org/10.1921/19629>.
- Brodeur, A., & Connolly, M. (2013). Do higher child care subsidies improve parental well-being? Evidence from Quebec's family policies. *Journal of Economic Behavior & Organization*, 93, 1–16. <https://doi.org/10.1016/j.jebo.2013.07.001>.
- Broekhuizen, M. L., Mokrova, I. L., Burchinal, M. R., & Garrett-Peters, P. T. (2016). Classroom quality at pre-kindergarten and kindergarten and children's social skills and behavior problems. *Early Childhood Research Quarterly*, 36, 212–222. <https://doi.org/10.1016/j.ecresq.2016.01.005>.
- Burström, B., Whitehead, M., Clayton, S., Fritzell, S., Vannoni, F. & Costa, G. (2010). Health inequalities between lone and couple mothers and policy under different welfare regimes – The example of Italy, Sweden and Britain. *Social Science & Medicine*, 70(6), 912–920. <https://doi.org/10.1016/j.socscimed.2009.11.014>.
- Busseri, M. A., & Sadava, S. W. (2011). A review of the tripartite structure of subjective well-being: implications for conceptualization, operationalization, analysis, and synthesis. *Personality and Social Psychology Review*, 15(3), 290–314. <https://doi.org/10.1177/1088868310391271>.
- Chaudry, A. (2004). *Putting children first. How low-wage working mothers manage child care*. Russell Sage Foundation. <http://www.jstor.org/stable/10.7758/9781610441193>.
- Chzhen, Y., Gromada, A., & Rees, G. (2019). Are the world's richest countries family friendly? Policy in the OECD and EU. [https://www.unicef-irc.org/publications/pdf/Family-Friendly-Policies-Research\\_UNICEF\\_%202019.pdf](https://www.unicef-irc.org/publications/pdf/Family-Friendly-Policies-Research_UNICEF_%202019.pdf).
- Compton, J., & Pollak, R. A. (2014). Family proximity, childcare, and women's labor force attachment. *Journal of Urban Economics*, 79, 72–90. <https://doi.org/10.1016/j.jue.2013.03.007>.

- Connolly, M., & Haeck, C. (2015). *Are childcare subsidies good for parental well-being? Empirical evidence from three countries* (CESifo DICE Report Issue). <https://www.ifo.de/DocDL/dicereport115-forum2.pdf>.
- Craig, L., & Churchill, B. (2018). Parenting stress and the use of formal and informal child care: associations for fathers and mothers. *Journal of Family Issues*, 39(12), 3203–3224. <https://doi.org/10.1177/0192513x18776419>.
- Craig, L., & Powell, A. (2013). Non-parental childcare, time pressure and the gendered division of paid work, domestic work and parental childcare. *Community, Work & Family*, 16(1), 100–119. <https://doi.org/10.1080/13668803.2012.722013>.
- De Schipper, J. C., Van Ijzendoorn, M. H., & Tavecchio, L. W. C. (2004). Stability in center day care: relations with children's well-being and problem behavior in day care. *Social Development*, 13(4), 531–550. <https://doi.org/10.1111/j.1467-9507.2004.00282.x>.
- Del Boca, D., Piazzalunga, D., & Pronzato, C. (2018). The role of grandparenting in early childcare and child outcomes. *Review of Economics of the Household*, 16(2), 477–512. <https://doi.org/10.1007/s11150-017-9379-8>.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542–575. <https://doi.org/10.1037/0033-2909.95.3.542>.
- Diener, E., Emmons, R. A., Larsen, R. J. & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. [https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13).
- Diener, E., & Suh, M. E. (1998). Subjective well-being and age: an international analysis. In Schaie, K. W. & Lawton, M. P. (Eds.), *Annual review of gerontology and geriatrics, Vol. 17: Focus on emotion and adult development*. (pp. 304–324). Springer Publishing Co.
- Eid, M., & Larsen, R. J. (2008). *The science of subjective well-being*. Guilford Press.
- Federal Statistical Office. (2021). *Household budget survey: results 2019*. <https://www.bfs.admin.ch/bfs/en/home/statistics/catalogues-databases/press-releases.assetdetail.19264890.html>.
- Felfe, C., Lechner, M., & Thiemann, P. (2016). After-school care and parents' labor supply. *Labour Economics*, 42, 64–75. <https://doi.org/10.1016/j.labeco.2016.06.009>.
- Fergusson, E., Maughan, B., & Golding, J. (2008). Which children receive grandparental care and what effect does it have? *Journal of Child Psychology and Psychiatry*, 49(2), 161–169.
- Fioretta, J., & Rossier, C. (2018). *Le travail rémunéré à temps plein des mères: malédiction ou bénédiction? le cas singulier de la Suisse comparé à la Belgique, la France, l'Allemagne et la Suède* (68). <https://www.centre-lives.ch/fr/bibcite/reference/5>.
- García-Morán, E., & Kuehn, Z. (2017). With strings attached: grandparent-provided child care and female labor market outcomes. *Review of Economic Dynamics*, 23, 80–98. <https://doi.org/10.1016/j.red.2016.09.004>.
- Geurts, T., Poortman, A.-R., & van Tilburg, T. G. (2012). Older parents providing child care for adult children: does it pay off. *Journal of Marriage and Family*, 74(2), 239–250. <https://doi.org/10.1111/j.1741-3737.2011.00952.x>.
- Gray, A. (2005). The changing availability of grandparents as carers and its implications for childcare policy in the UK. *Journal of Social Policy*, 34(4), 557–577. <https://doi.org/10.1017/S0047279405009153>.
- Havnes, T., & Mogstad, M. (2011). Money for nothing? Universal child care and maternal employment. *Journal of Public Economics*, 95(11), 1455–1465. <https://doi.org/10.1016/j.jpubeco.2011.05.016>.
- Healy, O., & Dunifon, R. (2014). Child-care subsidies and family well-being. *Social Service Review*, 88(3), 493–528. <https://doi.org/10.1086/677741>.
- Henly, J. R., & Lambert, S. (2005). Nonstandard work and child-care needs of low-income parents. In S. M. Bianchi, L. M. Casper, & R. B. King (Eds.), *Work, family, health, and well-being*. (pp. 473–492). Lawrence Erlbaum Associates Publishers.
- Herbst, C. M., & Tekin, E. (2014). Child care subsidies, maternal health, and child–parent interactions: evidence from three nationally representative datasets. *Health Economics*, 23(8), 894–916. <https://doi.org/10.1002/hec.2964>.
- Hox, J. J. (2002). *Multilevel analysis. Techniques and applications*. Lawrence Erlbaum Associates.
- Igel, C. & Szydlik, M. (2011). Grandchild care and welfare state arrangements in Europe. *Journal of European Social Policy*, 21(3), 210–224. <https://doi.org/10.1177/0958928711401766>.
- Joye, D., & Schuler, M. (1995). *Stratification sociale en Suisse: catégories socio-professionnelles*. Swiss Federal Statistical Office.
- Kuhn, U., & Ravazzini, L. (2018). *Moral pressures for women to stay home: incorporating gender role attitudes into a categorical labour supply model of couples* (3146965). <https://ssrn.com/abstract=3146965>.
- Le Goff, J.-M., & Ryser, V.-A. (2013). Mariage et union consensuelle avec enfant en Suisse. In D. Tabutin & B. Masquelier (Eds.), *Ralentissements, résistances et ruptures dans les transitions démographiques* (pp. 157–172). Presses Universitaires de Louvain.
- Lefebvre, P., & Merrigan, P. (2008). Child-care policy and the labor supply of mothers with young children: a natural experiment from Canada. *Journal of Labor Economics*, 26(3), 519–548. <https://doi.org/10.1086/587760>.
- Levy, R., & Widmer, E. (2013). *Gendered life courses between standardization and individualization: a European approach applied to Switzerland* (Vol. 18). LIT Verlag Münster.
- Lipps, O. (2007). Attrition in the Swiss household panel. *Methoden, Daten, Analysen (Mda)*, 1(1), 45–68. [https://www.ssoar.info/ssoar/bitstream/handle/document/12644/ssoar-mda-2007-1-lipps-attrition\\_in\\_the\\_swiss\\_household.pdf?sequence=1&isAllowed=y&lnkname=ssoar-mda-2007-1-lipps-attrition\\_in\\_the\\_swiss\\_household.pdf](https://www.ssoar.info/ssoar/bitstream/handle/document/12644/ssoar-mda-2007-1-lipps-attrition_in_the_swiss_household.pdf?sequence=1&isAllowed=y&lnkname=ssoar-mda-2007-1-lipps-attrition_in_the_swiss_household.pdf).
- Luhmann, M., Hofmann, W., Eid, M., & Lucas, R. E. (2012). Subjective well-being and adaptation to life events: a meta-analysis. *Journal of Personality and Social Psychology*, 102(3), 592–615. <https://doi.org/10.1037/a0025948>.
- Lundberg, O., Yngwe, M. Å., Stjärne, M. K., Elstad, J. I., Ferrarini, T., Kangas, O., Norström, T., Palme, J., & Fritzell, J. (2008). The role of welfare state principles and generosity in social policy programmes for public health: an international comparative study. *The Lancet*, 372(9650), 1633–1640.
- Magnuson, K. A., Ruhm, C., & Waldfogel, J. (2007). Does pre-kindergarten improve school preparation and performance. *Economics of Education Review*, 26(1), 33–51. <https://doi.org/10.1016/j.econedurev.2005.09.008>.
- Matysiak, A., & Weźiak-Białowolska, D. (2016). Country-specific conditions for work and family reconciliation: an attempt at quantification. [journal article]. *European Journal of Population*, 32(4), 475–510. <https://doi.org/10.1007/s10680-015-9366-9>.
- Morrissey, T. W. (2008). Familial factors associated with the use of multiple child-care arrangements. *Journal of Marriage and Family*, 70(2), 549–563. <https://doi.org/10.1111/j.1741-3737.2008.00500.x>.
- Morrissey, T. W. (2009). Multiple child-care arrangements and young children's behavioral outcomes. *Child Development*, 80(1), 59–76. <https://doi.org/10.1111/j.1467-8624.2008.01246.x>.
- Perry-Jenkins, M., & Gerstel, N. (2020). Work and family in the second decade of the 21st century. *Journal of Marriage and Family*, 82(1), 420–453. <https://doi.org/10.1111/jomf.12636>.
- Pilarz, A. R., & Hill, H. D. (2014). Unstable and multiple child care arrangements and young children's behavior. *Early Childhood Research Quarterly*, 29(4), 471–483. <https://doi.org/10.1016/j.ecresq.2014.05.007>.

- Pilarz, A. R., & Hill, H. D. (2017). Child-care instability and behavior problems: does parenting stress mediate the relationship? *Journal of Marriage and Family*, 79(5), 1353–1368. <https://doi.org/10.1111/jomf.12420>.
- Press, J., Fagan, J. & Bernd, E. (2006). Child care, work, and depressive symptoms among low-income mothers. *Journal of Family Issues*, 27(5), 609–632. <https://doi.org/10.1177/0192513X05285292>.
- Rothenbühler, M., & Voorpostel, M. (2016). Attrition in the Swiss Household Panel: are vulnerable groups more affected than others? In M. Oris, C. Roberts, D. Joye, & M. Ernst Stähli (Eds.), *Surveying Human Vulnerabilities across the Life Course* (pp. 223–244). Springer International Publishing. [https://doi.org/10.1007/978-3-319-24157-9\\_10](https://doi.org/10.1007/978-3-319-24157-9_10).
- Rüh, T., Schüpbach, J., & Hurst, S. (2016). Habitat, trajet pendulaire, crèche: où la vie est-elle la moins chère? In L. Centola & F. Hasenmaile (Eds.), *Swiss Issues Région*.
- Rupert, P. & Zanella, G. (2018). Grandchildren and their grandparents' labor supply. *Journal of Public Economics*, 159, 89–103. <https://doi.org/10.1016/j.jpubeco.2017.12.013>.
- Ryser, V.-A., & Le Goff, J.-M. (2015). Family attitudes and gender opinions of cohabiting and married mothers in Switzerland. *Family Science*, 6(1), 370–379. <https://doi.org/10.1080/194620.2015.110155>.
- Scherer, K. R., Wraniak, T., Sangsue, J., Tran, V. & Scherer, U. (2004). Emotions in everyday life: probability of occurrence, risk factors, appraisal and reaction patterns. *Social Science Information*, 43(4), 499–570. <https://doi.org/10.1177/0539018404047701>.
- Schmitz, S. (2019). The impact of publicly funded childcare on parental well-being: evidence from cut-off rules. *European Journal of Population*. <https://doi.org/10.1007/s10680-019-09526-z>.
- Schober, P. S., & Schmitt, C. (2013). *Day-care expansion and parental subjective well-being: evidence from Germany* ([http://www.diw.de/documents/publikationen/73/diw\\_01.c.431283.de/diw\\_sp0602.pdf](http://www.diw.de/documents/publikationen/73/diw_01.c.431283.de/diw_sp0602.pdf), Issue).
- Schober, P. S., & Schmitt, C. (2017). Day-care availability, maternal employment and satisfaction of parents: Evidence from cultural and policy variations in Germany. *Journal of European Social Policy*, 27(5), 433–446. <https://doi.org/10.1177/0958928716688264>.
- Scott, E. K., London, A. S., & Hurst, A. (2005). Instability in patchworks of child care when moving from welfare to work. *Journal of Marriage and Family*, 67(2), 370–386. <http://www.jstor.org/stable/3600275>.
- SHP Group. (2020). Living in Switzerland Waves 1-21 [Dataset]. <https://doi.org/10.23662/FORS-DS-932-5>.
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis: Modeling change and event occurrence*. Oxford University Press.
- Speirs, K. E., Vesely, C. K., & Roy, K. (2015). Is stability always a good thing? Low-income mothers' experiences with child care transitions. *Children and Youth Services Review*, 53, 147–156. <https://doi.org/10.1016/j.childyouth.2015.03.026>.
- Swiss Confederation. (2022). <https://www.ch.ch/en/family-and-partnership/maternity-and-paternity/pregnancy-andbirth/maternity-and-paternity-leave/>.
- Tillmann, R., Voorpostel, M., Kuhn, U., Lebert, F., Ryser, V.-A., Lipps, O., Wermli, B., & Antal, E. (2016). The Swiss household panel study: observing social change since 1999. *Longitudinal and life course studies*, 7(1), 64–78. <https://doi.org/10.14301/lcs.v7i1.360>.
- Tran, H., & Weinraub, M. (2006). Child care effects in context: quality, stability, and multiplicity in nonmaternal child care arrangements during the first 15 months of life. *Developmental Psychology*, 42(3), 566–582. <https://doi.org/10.1037/0012-1649.42.3.566>.
- Verhoef, M., Plagnol, A. C., & May, V. (2018). Linking formal child care characteristics to children's socioemotional well-being: a comparative perspective. *Journal of Child and Family Studies*, 27(11), 3482–3496. <https://doi.org/10.1007/s10826-018-1185-2>.
- Verhoef, M., Roeters, A., & Lippe, T. (2016). Couples' work schedules and child-care use in the Netherlands. *Journal of Child & Family Studies*, 25(4), 1119–1130. <https://doi.org/10.1007/s10826-015-0289-1>.
- Votruba-Drzal, E., Coley, R. L., Koury, A. S., & Miller, P. (2013). Center-based child care and cognitive skills development: Importance of timing and household resources. *Journal of Educational Psychology*, 105(3), 821–838. <https://doi.org/10.1037/a0032951>.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>.
- Wheelock, J., & Jones, K. (2002). 'Grandparents are the next best thing': informal childcare for working parents in Urban Britain. *Journal of Social Policy*, 31(3), 441–463. <https://doi.org/10.1017/S0047279402006657>.
- Widmer, E., & Ritschard, G. (2009). The de-standardization of the life course: are men and women equal. *Advances in Life Course Research*, 14(1-2), 28–39. <https://doi.org/10.1016/j.alcr.2009.04.001>.
- Yoo, J. & Russell, D. W. (2020). Caring for grandchildren and grandparents' physical and mental health changes. *Journal of Child and Family Studies*, 29(3), 845–854. <https://doi.org/10.1007/s10826-019-01618-y>.