Interdependencies in mothers' and daughters' work-family life course trajectories: Similar but different?

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Abstract:
Women's life courses underwent substantial changes in the family and work domains in the second half of the 20th century. The associated fundamental changes in opportunity structures and values challenged the importance of families of origin for individual life courses, but two separate research strands suggest enduring within-family reproduction of women's family behavior and work outcomes. We revisit this issue by studying two complementary types of intergenerational associations in women's combined work-family trajectories. On the one hand, we examine similarities across mothers' and daughters' work-family trajectories to address the direct within-family reproduction of female life courses (intergenerational persistence). On the other hand, we examine systematic associations between work-family trajectories that are typical in each generation to address intergenerational interdependencies beyond direct reproduction that account for individual and societal constrains and opportunities faced by each generation (intergenerational correspondence). We use a within-dyad approach to sequence analysis and examine combined work-family trajectories between the ages 18 to 35 of two generations of women, born in 1930–1949 and in 1958–1981, within the same family drawn from the German Socio-Economic Panel. Overall, we find evidence of small but non-trivial persistence in work-family trajectories across generations that is partly attributed to within-family mechanisms of reproduction. In addition, we find correspondence across typical trajectory patterns of each generation, without daughters necessarily resembling their mothers' trajectories. The strength of the intergenerational associations varies by social background. Our research improves and broadens our understanding of the reproduction of female life courses across generations.

Keywords: intergenerational transmission, women, life course, sequence analysis, Germany

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Introduction

In Germany and many other societies, women's typical life courses underwent substantial changes in the family and work domains in the second half of the 20th century. Women's educational attainment outpaced men's attainment, women substantially increased their labor force participation, and women increasingly entered high-status and well-paid occupations previously reserved for men (England 2010; Grave and Schmidt 2012; Trappe et al. 2015). At the same time, the transition into parenthood and further childbearing has been increasingly delayed in most post-industrialized societies, leading to overall lower fertility (Frejka and Sobotka 2008).

Against the backdrop of these fundamental societal changes, which profoundly reshaped typical female life course patterns, we examine the intergenerational interdependencies of women's work-family life courses, that is, the combined sequence of employment states and family states, within families in Germany. Studying intergenerational interdependencies is important for our understanding of contemporary female life courses, which often remain gendered despite much progress towards gender equality (Ridgeway 2011). One explanation put forward for this stall in the gender revolution (England 2010) is the inertia in traditional life course trajectories, in which women's care work is prioritized over wage work, across generations and within families (Platt and Polavieja 2016; van Putten et al. 2008).

Our study builds on recent advances in the analysis of intergenerational interdependencies in family trajectories, where the transmission of long-term and complex trajectories, such as combined birth and partnership histories, is examined instead of the transmission of point-in-time outcomes such as age at first birth (e.g., Liefbroer and Elzinga 2012; Fasang and Raab 2014; van Winkle et al. 2016). The analysis of trajectories enables us to simultaneously address sequences of multiple outcomes over an individual's lifetime to overcome the "short view on analytical scope" of the life course (Elder 1985: 31). Studying

the transmission of trajectories instead of point-in-time transitions and statuses enables us to address whether life courses are entirely reproduced or whether intergenerational reproduction at one point in time may coexist with intergenerational contrast at other points in the life course (van Winkle et al. 2016). Conceptually, the transmission of trajectories resonates with the notion that individuals' choices over their life courses are interconnected and interdependent with the lives of others (e.g. their parents). Studying the transmission of trajectories recognizes that "it is very unlikely that parents focus on transmitting just a specific behavior to children, rather than more generally on some guidelines for what they think constitutes a good life" (Bernardi 2016).

We extend research on the intergenerational interdependencies in women's life courses in three unique ways. First, we examine intergenerational interdependencies in *combined work-family trajectories*. The reproduction of life course patterns in the family domain has been examined (Fasang and Raab 2014; Liefbroer and Elzinga 2012; van Winkle 2016), but these studies did not consider the domain of work. This is a crucial shortcoming given that work and family choices over the life course are highly interdependent, particularly among recent birth cohorts (Moen and Sweet 2004; Huinink and Kohli 2014), and studying them separately obscures the heterogeneous pathways through which women negotiate their life courses (e.g., Aassve et al. 2007). It is also unlikely that parents influence children's choices just in one domain and not the other. Therefore, we cannot fully understand the transmission processes of women's life courses by studying work and family domains separately.

Second, we propose the distinction between intergenerational persistence and intergenerational correspondence as complementary concepts to improve our understanding of intergenerational interdependencies of life courses and we suggest empirical measures for both concepts. We refer to *intergenerational persistence* in the traditional notion of reproduction: the extent to which mothers' work-family life courses are replicated in their daughters' life courses. As it addresses direct reproduction across generations, objective

similarities in the work-family trajectories of mothers and daughters can be used as evidence for intergenerational persistence.

We argue, however, that the direct replication of parental behavior can be a too-narrow conceptualization of intergenerational interdependencies. We propose that intergenerational interdependencies can be observed in any systematic associations between typical trajectory patterns of each generation (i.e. women with similar trajectories will have daughters with similar trajectories—without daughters' trajectories necessarily resembling their mothers'), which we conceptualize as *intergenerational correspondence*. Thereby, we extend previous studies that discovered regularities, not only in similar but also in diverging family formation patterns between parents and children. These studies suggested that structural changes in education, employment, or attitudes towards gender can lead to deviations in trajectory patterns between parents and children which should have otherwise been similar (Fasang and Raab 2014; van Winkle et al. 2016). Arguably, parents may also transmit norms or support choices that are thought to best serve their children in the children's current context of opportunities, even though these choices may deviate from parents' own past choices (Tam 2015). Our concept of intergenerational correspondence accounts for the divergent individual and societal opportunities and constraints faced by mothers and daughters when negotiating their life courses.

Third, these intergenerational interdependencies may be further influenced by changes in individual endowments (e.g., increasing educational attainment between generations) or by structural changes (e.g., specific historical circumstances experienced by one generation but not by the other). Hence, we extend previous research by studying how intergenerational interdependence in work-family trajectories may vary due to different opportunities and constraints faced by mothers and daughters. For instance, daughters who are more highly educated than their mothers may be able to pursue different work-family trajectories. Furthermore, the life course perspective emphasizes how within-family processes of

reproduction are shaped by societal conditions and institutions (Mayer 2009). Hence, fundamental structural changes between generations may substantially affect these intergenerational associations. To illustrate this point, we choose German reunification and compare East Germany, a context of profound institutional change after reunification, with West Germany, a context of relative institutional continuity.

In the present study, we compare the work-family trajectories of two generations of women aged between 18 and 35 within the same families. Data are drawn from the Socio-Economic Panel Study, a large and high-quality multipurpose household panel study. We use a within-dyad approach to sequence analysis to examine the intergenerational interdependence of work-family trajectories, comparing mothers born between 1930 and 1949 in East and West Germany with their daughters, born between 1958 and 1981.

Background

Previous research

Our study is informed by two strands of empirical literature that separately examine intergenerational interdependence in the family and work domains. For the family domain, Liefbroer and Elzinga (2012) examined similarity in family trajectories as sequences of yearly family states from age 15 to 30 between two generations in the United States. They found that whereas typical trajectories changed substantially between generations, parent-child dyads were about 20% more similar than other unrelated dyads. Similarity was higher in dyads with highly educated parents. Switching from examining simple intergenerational similarity to examining regularities in intergenerational patterns, in a study of two generations of middle-class families in the United States, Fasang and Raab (2014) identified three types of patterns in intergenerational interdependence: strong transmission, moderate transmission, and an intergenerational contrast pattern. This approach is innovative in that it

enables us to expand our understanding of intergenerational interdependence to diverging behavior between generations. Similar patterns were identified for Germany, where families in West Germany are more likely to exhibit strong transmission and families in East Germany are more likely to exhibit intergenerational contrast (van Winkle et al. 2016). This strand of literature provides important insights into the intergenerational interdependence of family formation, but it ignores the work domain. In addition, it is limited by only considering direct similarity or identifying broad types of regularities between mothers and daughters, and thus, it neglects the interdependencies across similar and diverging (typical) work-family patterns of each generation.

A second, large strand of literature deals with intergenerational interdependence in the work domain, but this literature is exclusively concerned with point-in-time outcomes (e.g., Platt and Polavieja 2016; van Putten et al. 2008). For instance, in a recent study, McGinn et al. (2018) examined how maternal employment affects adult daughters' employment in 29 countries (including Germany). They found positive associations between mothers being employed and daughters being employed, daughters' supervisory responsibility, work hours, and incomes. Daughters of working mothers were more likely employed regardless of their mothers' social class, but the associations with other employment characteristics were influenced by social class. In addition, daughters raised in contexts with high female employment were less influenced by their mothers' employment regarding their supervisory responsibility and work hours. This strand of literature focuses on point-in-time outcomes without considering the embeddedness of these outcomes in more complex trajectories and the interrelatedness of work-family trajectories.

An emerging type of literature conceptualizes work-family trajectories as interlocked, multidimensional processes (Aassve et al. 2007; Aisenbrey and Fasang 2017). It is argued that prior research conceptualizing life courses as point-in-time outcomes focused on unidirectional influences—where either family outcomes influence work outcomes or *vice*

versa—and disregarding the complex interdependencies across work and family outcomes over the life course (Aisenbrey and Fasang 2017). With increasing and continued female labor force participation, the examination of the interdependence of individuals' goals, resources and behavior in the work and family domains has become more salient in contemporary societies. Using sequence analysis, the associated empirical research examined combined work-family patterns, as well as their precursors and consequences (Aassve et al 2007; Scherger et al. 2016; Lesnard et al. 2016). It was found for Germany and other advanced economies that despite women's careers being increasingly heterogeneous, they often remain gendered (McMunn et al. 2015; Aisenbrey and Fasang 2017). Many female life courses still feature career breaks and spells of part-time employment following motherhood. Although parental background remains an important precursors of women's work-family patterns, this research has not yet addressed the intergenerational interdependencies of combined work-family trajectories.

Intergenerational transmission of women's work-family trajectories

From a life course perspective, within-family transmissions are best understood as long-term processes. Individuals' life choices are not purely situational, but follow a biographical logic, i.e., a wider process combining past experience and uncertain expectations about the consequences from today's choices (Bernardi et al. 2019). Despite the de-standardization of the life course (i.e., the fact that life choices are increasingly different from one individual to another), culturally and institutionally supported life scripts are often used as reference points to guide actions over the life course (Huinink and Kohli 2014). Increasingly, research indicates that parents significantly contribute to the shaping of their children's biographical orientations of what a 'normal' or 'successful' life course is (Bernardi 2016).

Any intergenerational interdependence of work-family trajectories may operate through multiple—complementary rather than mutually exclusive—mechanisms. First, life

courses can be directly transmitted through parents' attitudes and values as well as through the observation of their actual behaviors (e.g., Moen et al. 1997; Platt and Polavieja 2016). Processes of *socialization* and *social control* as a direct influence of mothers on daughters' life courses refer to the notion that parents purposively aim to affect their children's lives in a way that they perceive as desirable. Moreover, *social learning* theory holds that children learn about certain behaviors and their consequences from observing and imitating their parents (e.g., Bandura 1977). Such parental attitudes and role modeling will likely influence the general guidelines about how to live life rather than only specific behaviors at given ages (Bernardi 2016).

Second, parents may transmit not only specific attitudes, values, and preferences but also social, cultural, and economic resources, thereby exerting an indirect influence on their children's life courses. Thus, the *inheritance of social status* is another noteworthy mechanism of maternal influence on daughters' life courses (e.g., Liefbroer and Elzinga 2012). From this perspective, parents and children display similar sets of preferences and normative beliefs that guide their life courses because they are exposed to similar opportunity structures and environmental influences (Moen et al. 1997).

Last, *genetic inheritance* may contribute to the association of mothers' and daughters' life courses. In recent research, the family of origin has increasingly been considered a social and genetic point of departure to explain status attainment and social mobility (e.g., Diewald et al. 2015). Along the same lines, a growing body of research suggests that there might be genetic transmission of family-related behaviors (in particular for fertility; see Mills and Tropf 2015). Despite these studies have shown a significant heritable component in preferences for a range of social behaviors, the extent to which family environment or genetic dispositions matter for social behavior is still debated (Benjamin et al. 2012). Some research evidence suggest that genetic dispositions play a smaller role the more the wider institutional and cultural context constrains behavior (Cleveland et al. 2001).

Intergenerational persistence

We propose the distinction between *intergenerational persistence* and *intergenerational correspondence* as complementary concepts in understanding the complex forms of intergenerational interdependencies in life courses. The concept of *intergenerational persistence* broadly refers to the direct reproduction or replication of individual life course trajectories across generations. Intergenerational persistence has conventionally been studied in the literature on intergenerational interdependencies. As a first empirical objective, we examine *the intergenerational persistence in combined work-family trajectories* of mothers and daughters; i.e., the extent to which mothers have daughters with similar work-family trajectories. As Liefbroer and Elzinga (2012) suggest, direct reproduction of life course trajectories can be measured as objective similarities between mothers and daughters in (the occurrence, timing and sequencing of) life course outcomes.

The within-family mechanisms described above cause daughters to mimic their mothers' trajectories. Despite this, similarity between mothers' and daughters' life courses may be largely or partly caused by the wider social context. For instance, women's gendered life courses can be a byproduct of educational institutions, and employment and family policies (e.g., early childcare or the school system) that still favor traditional household arrangements (for Germany: Kruger and Ley, 2001). In contrast, however, direct reproduction across generations may be challenged because daughters face a different set of opportunities and constraints than their mothers. In Germany, there has been great change in women's employment and family behavior over time; for example, maternal employment clearly increased across cohorts (e.g., Trappe et al. 2015).

To quantify the degree of persistence in the family, we deploy a counterfactual design by comparing related dyads to unrelated dyads of mothers and daughters. Similarity for related dyads measures the degree of correlation in work-family trajectories between mothers and daughters, which could result from both family and societal mechanisms. In contrast,

similarity for unrelated dyads measures the correlation in work-family trajectories between two random, unrelated women from two generations, which could only result from societal mechanisms. We expected to find modest persistence in work-family trajectories between mothers and daughters, with such persistence partly operating through family-related mechanisms. A significant larger average similarity among related dyads than among unrelated dyads would be used as evidence to confirm this expectation.

Intergenerational correspondence

The concept of intergenerational correspondence extends the notion of transmission as the replication of a mother's life courses by acknowledging that systematic regularities in work-family trajectories between mothers and daughters are evidence of intergenerational interdependence beyond direct resemblance. Our second empirical objective is to examine the *intergenerational correspondence of typical trajectories from each generation*. To this end, we study the relationships between mothers' clustered work-family trajectories and daughters' clustered work-family trajectories. We examine the overall correspondence between typical work-family trajectory patterns of each generation using associational measures for categorical variables. We further examine the associations across specific work-family patterns of the mother generation and the daughter generation, which sheds light on potential continuities and discontinuities in typical mother's work-family patterns in the daughter generation.

Although individual uniqueness and specificities are lost by clustering trajectories in aggregate patterns, the comparisons of generation-specific patterns offer additional insight on intergenerational processes, and acknowledge diversity in the forms of transmission across generations that faced different sets of opportunities and constraints. Structural changes in education, employment or attitudes towards gender can lead to deviations in

trajectory patterns between parents and children, which would have otherwise followed similar patterns (Fasang and Raab 2014).

We argue that intergenerational correspondence across distinct patterns may follow from within-family mechanisms such as mother's normative influence and (negative) role modelling, along with daughters adapting (the general guidelines acquired at home) to the new societal constrains and opportunities. Tam (2015) proposes that when choosing what values or attitudes to transmit, parents not only consider their own orientations but also their perceptions about what is normatively important in a given socio-historical context. The perspective of perceived norms is more salient when the aim of parental socialization is not to preserve traditional values but to support children's adaptation to society (Tam and Chan 2015). In line with this argument, Bernardi and Oppo (2008) analyze women's work-family decisions in Sardinia and find evidence for mothers advising daughters on limiting the number of children in order to be able to fulfil the contemporary female roles combining work and family. Given the familialistic context and the important childcare role of grandparents in Sardinia, mothers seemed to greatly influence their daughters' fertility choices even if these show little resemblance with their own life choices. Also, Macke and Morgan (1978) examined views on maternal employment among senior girls attending public schools in Louisville (Kentucky) and found that daughters of black working mothers would prefer avoiding maternal employment while their children are young. The fact that black mothers often held less desirable, lower-status jobs functions as a negative role model for their daughters, who may prefer a life-style more rewarding than their mothers had. While evidence from these researches would support the interdependence of distinct patterns between mothers and daughters due to socialization and social learning, it seems less likely that status or genetic inheritance *per se* would determine the interdependence of distinct patterns, unless these mechanisms reinforce either the role of parental preferences or the adjustment of children's outcomes to the socio-historical conditions.

We expect to find evidence for moderate intergenerational correspondence that underlie a (partial) continuity in typical mother's patterns in the daughter's generation, where daughters from the same type of mothers may have similar types of work-family trajectories. That is, daughters' work-family trajectories may share common features or some similarity given the different institutional and structural conditions each generation faces. For instance, due to fertility decline and postponement, we expect that the daughters of working mothers display a relatively similar pattern of re-integration in the labor market after childbirth, but differential fertility behavior. We also expect to find evidence for intergenerational correspondence in typical patterns of mothers and daughters that show less or little resemblance. Such pattern of correspondence would in part relate to a decline of typical mothers' patterns in the daughter's generation. Given the greater educational and labor market opportunities for daughters, (unhappy) stay-at-home mothers may be negative role models, and may support and socialize their daughters into postponing fertility and re-integrating in the labor market after childbirth.

Heterogeneity in intergenerational interdependencies in work-family trajectories

As a third empirical objective, we examine *heterogeneity in the strength and direction of the intergenerational reproduction in work-family trajectories* by assessing variations in intergenerational interdependencies across different opportunities and constraints faced by each generation.

With regards to changing individual opportunities, intergenerational interdependencies in work-family trajectories may depend on the changes in the individual endowment of mothers and daughters. We look at educational mobility between mothers and daughters because educational attainment has important consequences for the subsequent life courses and, due to educational expansion, it is on average much higher for the daughter than the mother generation. Particularly, if daughters stay longer in education and achieve higher

educational attainment than their mothers, both their work and family life courses may develop differently compared to their less educated mothers, because higher educational attainment may lead to postponement of family formation and opens employment opportunities and prospects (Blossfeld and Huinink 1991). Thus, we expect intergenerational persistence to be lower if daughters attained higher education than their mothers. Despite this, we can expect some intergenerational correspondence between mothers' and daughters' typical trajectories if some daughters only delayed following in their mothers' footsteps due to their extended periods of education. The empirical results of Fasang and Raab (2014) regarding the moderate intergenerational transmission of family trajectories among highly educated daughters support such an expectation.

We note that maternal education is also a key element for understanding the role of individual endowments for women's intergenerational interdependencies. On the one hand, educational expansion arguably made commonplace the life-course trajectories of highly educated mothers in the daughters' generation. Thus, we can expect higher resemblance between the life courses of highly educated mothers and those of their daughters as a result of wider structural change. On the other hand, highly educated mothers are more likely to influence daughters' educations and subsequent life-course choices. Research shows that highly-educated parents are more resourceful and effective in influencing their children's behavior according to their preferences than less-educated parents (Barber 2001). Highly educated parents engage more actively in the long-term planning of their children and know more about risks such as early parenthood or work-related choices in early adulthood (Kim and Schneider 2005; Wiik 2009). Thus, we can expect higher resemblance between the life courses of highly-educated mothers and those of their daughters as a result of transmission processes. The findings of higher mother-daughter similarity in family trajectories for highly-educated mothers support this expectation (Liefbroer and Elzinga 2012; also see Sirniö et al. 2017).

At the macro level, structural changes across time may affect intergenerational interdependencies in work-family trajectories. In this regard, we study the variation in intergenerational interdependencies for mother-daughter dyads by comparing mothers in East Germany and West Germany. The existence of two German states between 1949 and 1990 provides a unique opportunity to examine the role of socio-political contexts for intergenerational interdependence. Regarding our interest in work-family trajectories, the institutional support for reconciling paid work and care work is central. In the socialist society in East Germany, the government aimed to achieve greater gender equality through female labor market participation while supporting high birth rates (Trappe 1996). This policy of high female labor market attachment was accompanied by generous childcare and family leave benefits allowing women to reconcile employment with care. In West Germany, by contrast, the male breadwinner model was the prevailing model of households' division of labor (Trappe et al. 2015). Work-family policies such as maternity leave, limited provision of childcare, and taxation contributed to this model. After the collapse of state socialism in Eastern Europe in 1989, East and West Germany were reunified in October 1990, with East Germany adopting the institutional conditions of West Germany. In the reunification process, East Germany saw a rapid and enormous transformation of institutions and industrial restructuring, whereas West Germany remained almost unchanged. Following reunification, female employment in East Germany changed tremendously due to these economic and societal transformations (Rosenfeld et al. 2004).

Arguably, profound institutional change might have truncated the support to typical work-family trajectories in East Germany, and thus we should expect less interdependence in work-family trajectories between generations for East Germany than for West Germany (Morosow and Trappe 2018; Engelhardt et al. 2002). However, stronger intergenerational continuity of family patterns in West Germany can be a by-product of more conservative values and religiosity (Goldstein and Kreyenfeld 2011). In contrast, East Germany remained

a more secular society even after reunification, which would explain the higher acceptance of non-traditional family trajectories beyond the role of institutions. One should also note that the transmission of social status (with known effects on life course choices) has traditionally been and still is more relevant in West Germany than in East Germany after reunification (Pollak 2011). Despite all this, the adoption of West German institutions has led to a gradual and incomplete convergence between social structures in East and West Germany. For instance, despite its progressive dismantlement after reunification, public support for mothers' full-time work in the form of early child care institutions remained high in East Germany compared to West Germany (Rosenfeld et al. 2004). Therefore, the intergenerational interdependence in women's work-family patterns in East Germany is not necessarily completely weakened.

Method

Mothers and daughters' generations

To make meaningful comparisons across generations, we draw two groups of birth cohorts that are relatively homogeneous within groups and relatively heterogeneous between groups. The mother generation includes women born between 1930 and 1949 who became mothers between 1958 and 1981 and experienced a post-war life course. The daughter generation (born between 1958 and 1981, accordingly) experienced substantial shifts in female life courses compared to earlier generations. On average, women in the daughter generation displayed higher educational attainment, later entry into the labor market, fewer and later marriages, and lower fertility than the mother generation. Additionally, most of the work-family life course of the mother generation developed in opposed institutional settings in East and West Germany (1949–1989). In contrast, the daughter generation saw some or most of their work-family life course develop under a unified socio-political context (since 1990).

Data and Sample

Our data demands are high, because we need to link comprehensive information on work-family trajectories between two generations within families. We use the German Socio-Economic Panel (SOEP; doi: 10.5684/soep.v34; Goebel et al. 2019), a representative longitudinal study of private households in West and East Germany, conducted since 1984 and 1990, respectively. The survey has a genealogical design by which children are followed when they move out of the parental household. This makes SOEP a good fit for our research purposes, because it enables us to link female survey respondents from two generations within one family. The combination of a prospective panel structure with retrospective employment and family histories allows for comparing the two generations over a long period of adulthood.

To examine intergenerational interdependencies between mothers and daughters we have to restrict the sample to female respondents who are mothers (here called the mother generation, born between 1930 and 1949) and daughters (daughter generation, born between 1958 and 1981) of another respondent and part of the same household for at least one survey wave (*related dyads sample*). Additionally, for sample inclusion, mothers and daughters have to be observed at least until age 35 to not have missing information on key analytical variables, and to have lived either in East Germany or in West Germany prior to reunification in 1990. After exclusions, our sample consists of 662 daughters and their 584 mothers, a sample size comparable to that in other studies using a similar approach (Fasang and Raab 2014). While 544 daughters lived in West Germany in 1989, 118 daughters lived in East Germany in 1989. Despite our related dyads sample contains only about 10 percent of women from the original sample, both samples display similar socio-demographic compositions.

For our analytical purposes, we also draw additional respondents of the mother and daughter generations. On the one hand, we need to match mothers with unrelated women from a random sample of survey respondents of the daughters' same five-year age group

(*unrelated dyads sample*). Additionally, we will assess typical patterns in work-family life courses of the mother and daughter generations using a wider, more representative random sample of women within the birth cohort ranges of each generation (including only mothers among those women of the mother generation). This population-level representative sample (*complete sample*), which also includes the women from our related dyads samples, amount to 3,153 women of the mother generation, and to 3,195 of the daughter generation.

Measurement

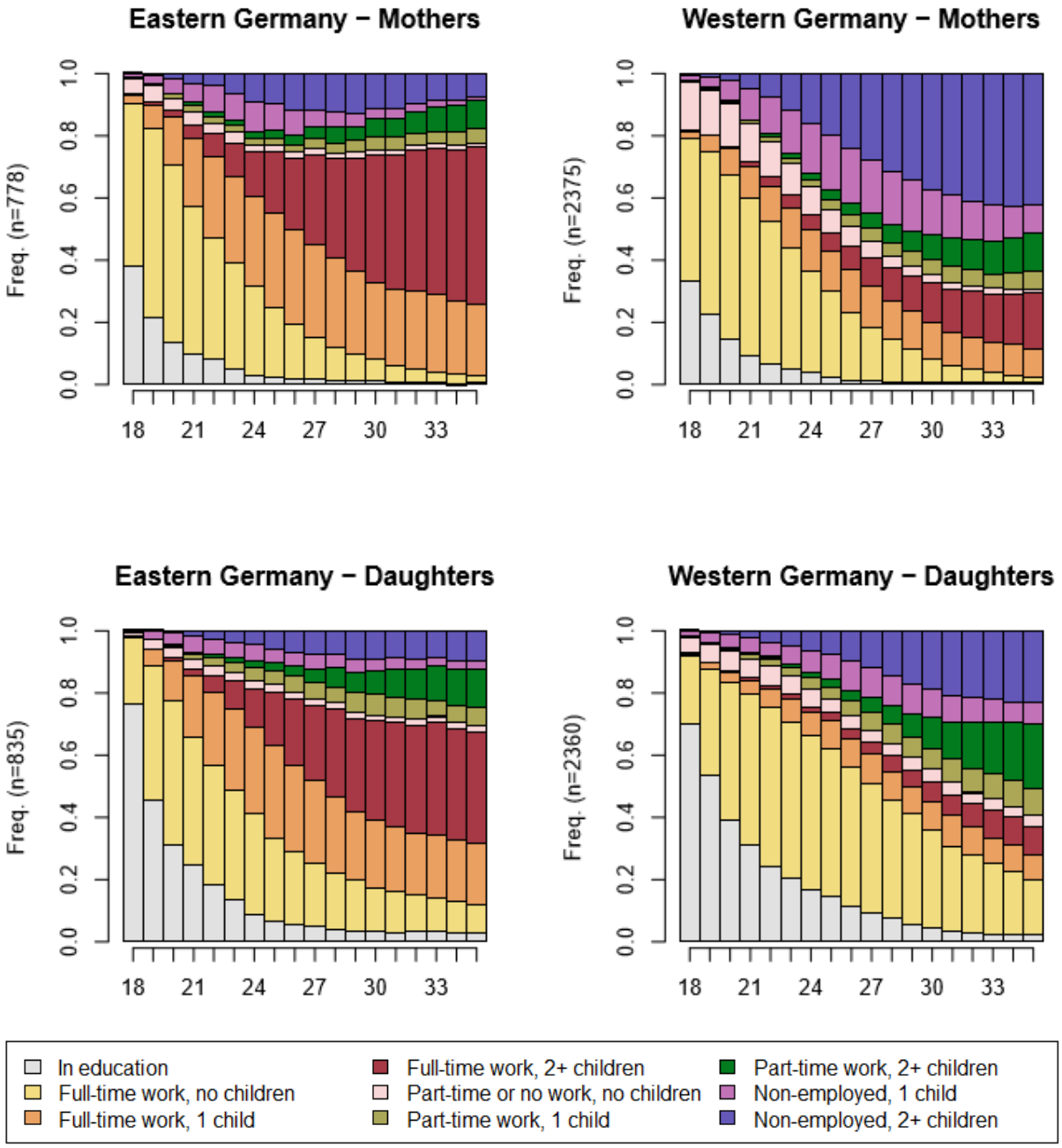
We use a yearly calendar from age 18 to age 35 to describe work-family trajectories. We choose the lower age limit based on the compulsory schooling age in Germany. Extending the life courses up to age 35 enable us to examine early and continued work-family development during young adulthood. We combine information regarding women's children parity (no child, one child, two or more children) and employment activity (education, full-time employed, part-time employed, not employed) to build state sequences. We disregard partnership status in our combined work-family states to keep the number of possible state sequences manageable for our analysis. Since partnership status has fewer consequences for the intersections between work and family than childbearing,[2] we assume that leaving this state aside will have little effect on our outcomes. Robustness checks using available retrospective information on marriage (but limiting the detail on childbearing) led to similar results to those presented here. Additionally, we do not differentiate being in education by parity because of very few observed cases in education with children for the two generations, arguably due to societal norms about the order of these events (Blossfeld and Huinink 1991). Numbers are relatively low among childless women in part-time employment, and for that

[2] Results from previous research show stronger associations between female employment and childbearing / number of children than between female employment and partnership status (Aassve et al. 2006). Despite empirical associations between marital status and employment in Germany, many have eroded in the second half of the 20th century (Buchholz et al. 2006).

reason we include them together with non-employed childless women in a combined state that reflects low attachment to the labor market. After these considerations, our sequence alphabet consists of nine differentiated states: “in education,” “full-time employed with no child,” “full-time employed with one child,” “full-time employed with two or more children,” “part-time or not employed with no child,” “part-time employed with one child,” “part-time employed with two or more children,” “not employed with one child,” and “not employed with two or more children.”

Figure 1 shows the yearly sample distributions (as proportions) of the nine work-family states between ages 18 and 35 for the mother and the daughter generations comparing East and West Germany. As prior research has shown, the daughter generation spent more time in education and in full-time employment before motherhood than the mother generation. Women of the mother generation transitioned early to first and second child, either remaining full-time employed (in East Germany) or moving out of the labor force (in West Germany). Compared to the mother generation, most women in the daughter generation had fewer children before age 35, and were more often in part-time employment after motherhood.

Figure 1. State distribution plots of work-family life courses by respondent's generation



Data: SOEP v34 (1984–2017; unweighted). Notes: Cross-sectional state frequencies by age of combined employment status and children parity states between age 18 and age 35.

Analytical strategy

Our analysis proceeds in three steps. First, we compute similarities in work-family trajectories between each pair of sequences for our complete sample. To this end, we deploy

an Optimal Matching (OM) distance metric with constant costs (substitution=2; indel=1). This renders a metric that emphasizes (dis-)similarity in the duration and order of states across sequences, which is appealing for comparisons across generations, as equal sequence matches are not expected. Robustness checks using alternative metrics (Dynamic Hamming Distance, Longest Common Subsequence) do not substantively change the results presented here. Because distances are calculated across each pair of sequences of the two-generation sample, the range of our distances correspond to the minimum and maximum difference across and within generations. We normalize the distances from the resulting matrix and generate similarities using the following formula

$$s(x, y) = 1 - \frac{d(x, y) - min\, d}{d - d}$$

where *s* denotes the similarity between sequences x and y, *d* is the distance between sequences x and y, and *min d* and *max d* are the minimum and maximum distances observed in our sample. The similarity *s* ranges from 0 (largest dissimilitude in our sample) to 1 (largest similitude in our sample), and thus, its values can be interpreted as a proportion of similarity between a pair of sequences within the sample range, and they can be averaged across groups for within-sample comparisons. We then extract similarities relating to each pair of sequences of related mother-daughter dyads—where mothers are matched to their daughters—and for unrelated mother-daughter dyads—where mothers are matched to random, non-related women from the generation of daughters (within the same five-year age group and region). For related mother-daughter dyads, average within-dyad similarities reflect the degree of persistence within the family in work-family trajectories. For unrelated dyads, average within-dyad similarities reflect general cross-generational continuity in work-family trajectories. Comparing both (related and unrelated) average within-dyad similarities, we

address the question of whether work-family trajectories persist within families, beyond wider societal processes that feed cross-generational persistence. Since within-dyad similarities are fairly normally distributed overall and across groups, we use arithmetic means of within-dyad similarities for the comparisons. On average, if individuals within families (i.e., related mother-daughter dyads) are more similar to each other than two unrelated individuals of each generation (i.e., unrelated mother-daughter dyads), this will be evidence of persistence within families. We use bootstrapped standard errors (1,000 replications) and confidence intervals to assess statistical differences in average similarities across types of dyads.

Second, we identify typical trajectory patterns of each generation and address whether the resulting patterns correspond across generations. Using cluster analysis on the matrix of distances, without prior normalization, we generate two typologies for typical work-family trajectory patterns of the mother's generation and the daughter's generation. We perform Ward hierarchical clustering, which is known to generate homogeneous clusters. We plot the association between the typologies in a Sankey diagram, which displays links between each pair of clusters of each generation and the link width indicates the proportion of mother-daughter dyads. We support the visual description with measures of association between nominal variables (Cramér's V) to assess the match of work-family trajectory patterns across generation.

Third, we address variations in these intergenerational associations by maternal education (three categories: low [up to elementary or basic vocational qualification], intermediate [general or vocational secondary qualification] and high [tertiary qualification]) daughters' education relative to maternal education (three categories: lower, equivalent and higher), as well as by comparing results between dyads of mothers in East Germany and West Germany.

Results

Persistence of work-family life courses

We first show results to address the extent to which work-family life courses persist between mothers and their daughters. Table 1 shows averages and bootstrapped standard errors with 95% confidence intervals of similarities across two types of dyads consisting of respondents for the mother generation and (i) their daughters (related dyad) and (ii) unrelated respondents of the daughter generation (unrelated dyad). Based on normalized OM distances, the average similarity among related dyads is about 0.33, with a 95% bootstrap confidence interval of 0.32 and 0.35. That is, about one-third of the work-family trajectories in the daughter generation persists from the trajectories of their own mothers. The average similarity of related dyads is statistically different from the average similarity of unrelated dyads, which is about 0.29, with a 95% bootstrap confidence interval of 0.27 and 0.30. Comparing confidence intervals for average similarities across related and unrelated dyads, we obtain initial evidence of persistence across generations to be higher within families (related dyads) than in the wider society (unrelated dyads). In particular, the work-family trajectories of mothers are 15% more similar to those of their own daughters than to those of any random women in the daughter's birth cohort.

Table 1. Average similarity in work-family life courses (dyadic normalized distances)

	Average similarity	SE	95% CI LB	95% CI UB
Related dyad	0.333	0.008	0.318	0.349
Unrelated dyad	0.286	0.008	0.270	0.302

Data: SOEP v34 (1984–2017; unweighted). Similarity measures are based on normalized OM distances, and range from 0 (largest dissimilitude) to 1 (largest similitude). CI= Confidence intervals based on bootstrap with 1,000 replications.

Table 2 shows results of the analysis of heterogeneity in intergenerational persistence in work-family trajectories. Regarding the socio-political context, we note that differences in average similarity of related dyads between East German mothers and their daughters (0.36; CI: 0.32–0.40) and West German mothers and their daughters (0.33; CI: 0.31–0.35) are not significant. As in our overall result, average similarity of related dyads is higher than the average similarity of unrelated dyads in East and West Germany (differences are only statistically significant for West Germany using a 95% CI).

We find substantive variation in average similarity across generations by maternal education. Confirming results of earlier research, average similarity is lowest when mothers have lower levels of education, increasing significantly with mothers' educational attainment. The average similarity of related dyads is 0.31 (CI: 0.29–0.33) when mothers have low levels of education, 0.38 (CI: 0.34–0.42) when mothers have intermediate levels of education, and 0.41 (CI: 0.37–0.46) when mothers have high levels of education. Persistence is higher within families because the average similarity of related dyads is systematically higher than the average similarity of unrelated dyads across all maternal education groups (differences are only statistically significant for the relatively larger low maternal education group using a strict 95% CI).

Table 2. Average similarity in work-family life courses by socio-political context and social background.

	Average similarity	SE	95% CI LB	95% CI UB	N
Region					
East Germany					
Related dyad	0.359	0.019	0.321	0.396	118
Unrelated dyad	0.315	0.017	0.281	0.350	118
West Germany					
Related dyad	0.328	0.009	0.310	0.346	536
Unrelated dyad	0.279	0.009	0.262	0.297	536
Maternal education					
Low					
Related dyad	0.309	0.010	0.291	0.328	465
Unrelated dyad	0.251	0.009	0.234	0.268	465
Intermediate					
Related dyad	0.380	0.018	0.344	0.415	137
Unrelated dyad	0.378	0.018	0.343	0.413	137
High					
Related dyad	0.412	0.023	0.366	0.458	60
Unrelated dyad	0.348	0.025	0.300	0.397	60
Daughter's education relative to maternal education					
Lower					
Related dyad	0.319	0.029	0.263	0.376	40
Unrelated dyad	0.328	0.029	0.271	0.384	40
Equivalent					
Related dyad	0.348	0.013	0.322	0.373	271
Unrelated dyad	0.282	0.014	0.255	0.310	271
Higher					
Related dyad	0.323	0.011	0.302	0.345	351
Unrelated dyad	0.284	0.011	0.263	0.305	351

Data: SOEP v34 (1984–2017; unweighted). Similarity measures are based on normalized OM distances, and range from 0 (largest dissimilitude) to 1 (largest similitude). CI= Confidence intervals based on bootstrap with 1,000 replications.

Regarding daughters' education relative to maternal education, we find no statistically significant differences in persistence because confidence intervals of related dyads across groups cross each other. Instead, we find higher persistence within the family when daughters have the same or higher level of education than their mothers. The positive difference between average similarity of related dyads and of unrelated dyads is substantive for both

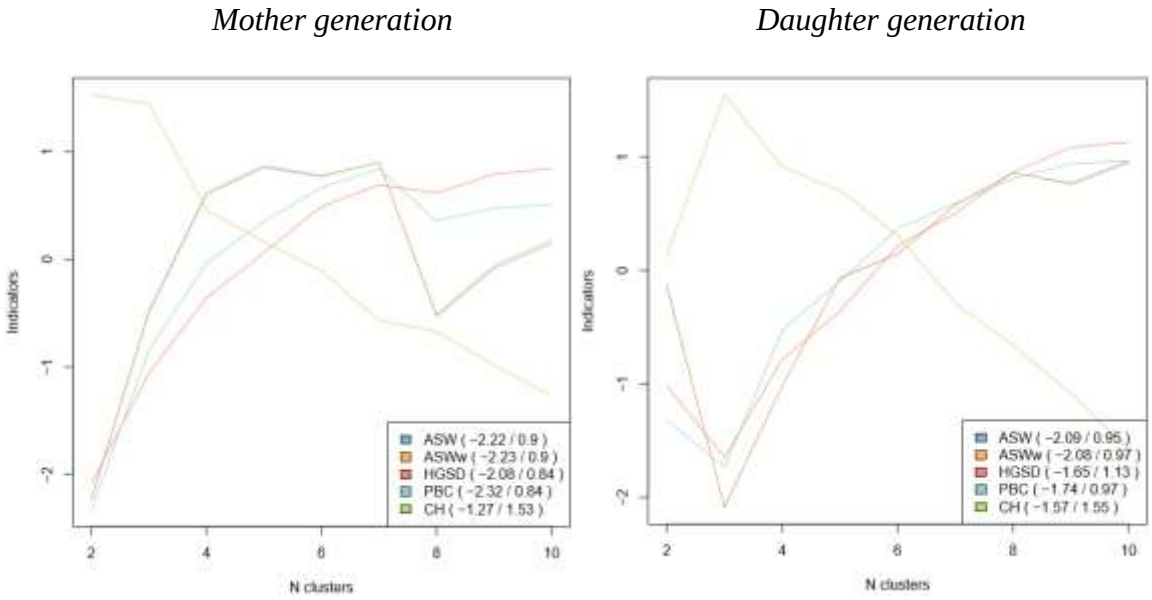
groups, but it is not statistically significant for higher relative education using a 95% confidence interval. For the small group of daughters who attained lower educational levels than their mothers, the average similarity of unrelated dyads is higher than the one of unrelated dyads, but the difference is not substantive.

Correspondence of work-family life trajectories

To account for generational changes in work-life course patterns, we show results of the analysis of correspondence between typical work-family trajectories that are specific to each generation. Using cluster analysis, we generated two typologies of work-family life course patterns, one for each generation. Empirical support using cluster cut-off criteria (see Figure 2) suggested several optimal cluster solutions for each generation. We disregarded cluster solution of 7 or more groups because it would lead to small case numbers per group, thus limiting the statistical power of the analysis of intergenerational correspondence. We decided to use 5-group and 6-group cluster solutions, for mothers and daughter generations respectively, as an optimal trade-off between group size and theoretical interpretation of groups. Robustness checks assessing between 4 and 6 cluster solutions for the mother and the daughter generations generated similar levels of overall correspondence to the ones presented here.

The grouped sequences are visually represented as Relative Frequency Sequence plots in Figure 3 for the mother generation and in Figure 4 for the daughter generation. These are graphical descriptions of the cluster-specific sequences that reduce over-plotting by showing a sample of representative sequences (medoids), and provide measures of goodness-of-fit to assess the homogeneity of the clusters (see Fasang and Liao 2014). These visual descriptions are interpreted with support of additional information presented in Table 3.

Fig 2. Cut-off criteria for cluster solutions by generation



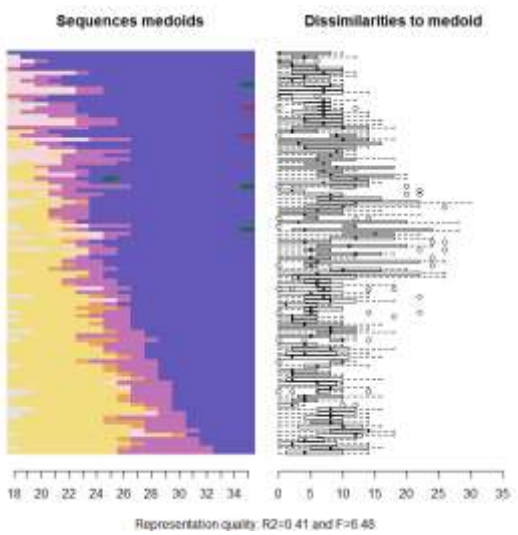
Data: SOEP v34 (1984–2017; unweighted). Notes: ASW-Average silhouette width; ASWw-Average silhouette width (weighted); HGSD-Hubert's Sommers´ D; PBC-Point Biserial Correlation; CH-Calinski-Harabasz index.

The most common pattern among women of the mother generation is that of "stay-at-home mothers," in which women enter motherhood early, have two or more children, leave any employment activity by the time of the first or second child, and remain non-employed until age 35. This pattern applies to over one-third of mothers in our related dyads sample (38.5%), many with low educational attainment (78.2% of cluster), and is considered the typical post-war pattern for West German women (96.5% of cluster). The second largest pattern for the mother generation ("late work dis-attachment"; 27.6% of mothers) denotes lower and delayed childbearing up to age 30 (on average) combined with lower work intensity after motherhood. Two additional groups are similar in that women start families early but, after short childbirth-related interruptions, return to full-time work. The difference across groups lies in the levels of fertility. In one relatively small group (3.4% of mothers), women had only one child until age 35—a pattern we call "work-focused" mothers. Women in the other group ("work and family combined"; 22.8% of mothers) had a second (and higher-order) child shortly after the first. Mothers in these two groups are often both highly

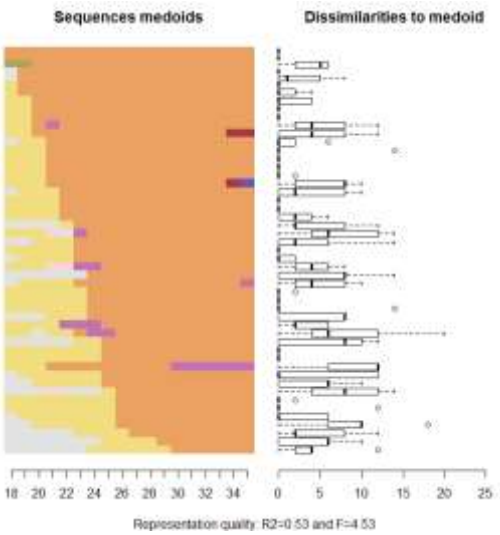
educated and highly concentrated in East Germany, where wider institutional and cultural support was available to working mothers. The last group ("return to part-time work"; 7.7% of mothers) features longer employment interruptions after childbirth, followed by returns to part-time employment.

Fig 3. Relative frequency sequence plots of work-family life courses between ages 18 and 35 (mother generation)

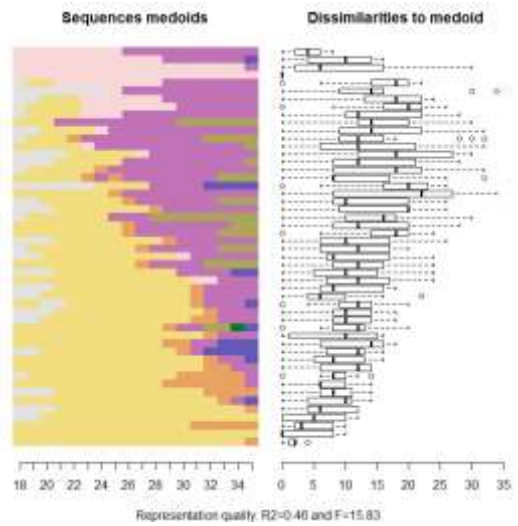
Stay-home mothers



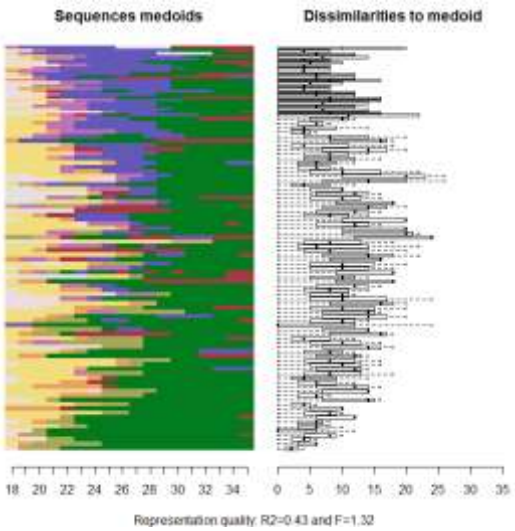
Work focused



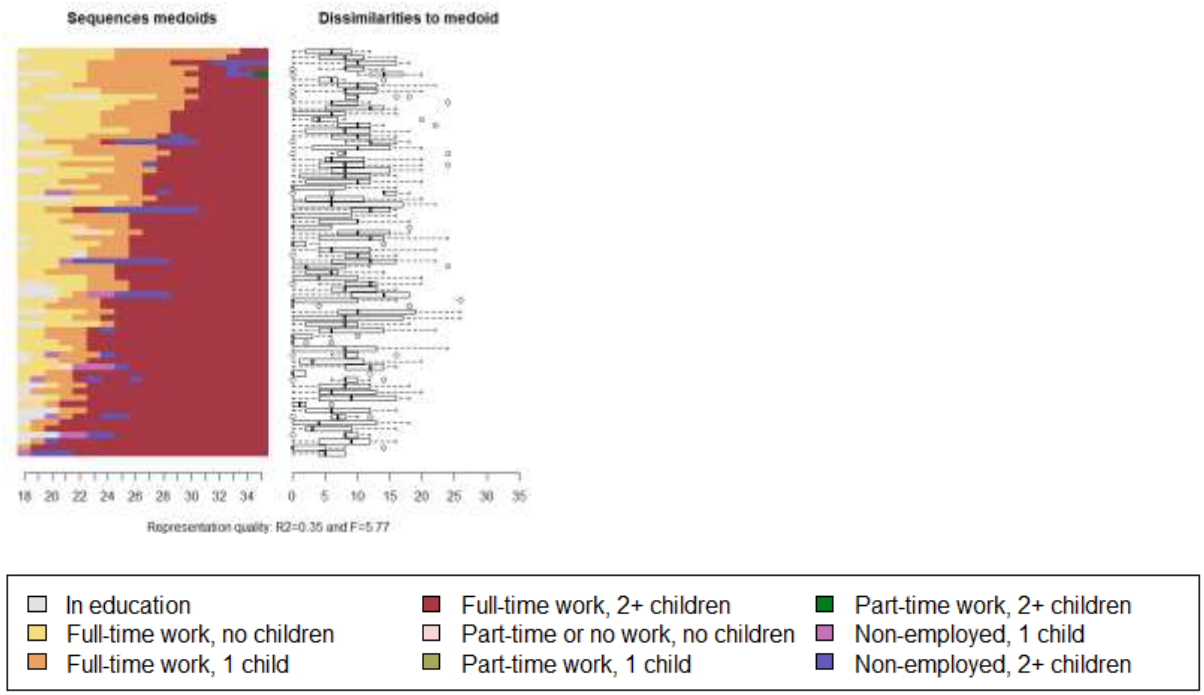
Late work dis-attachment



Return to part time work



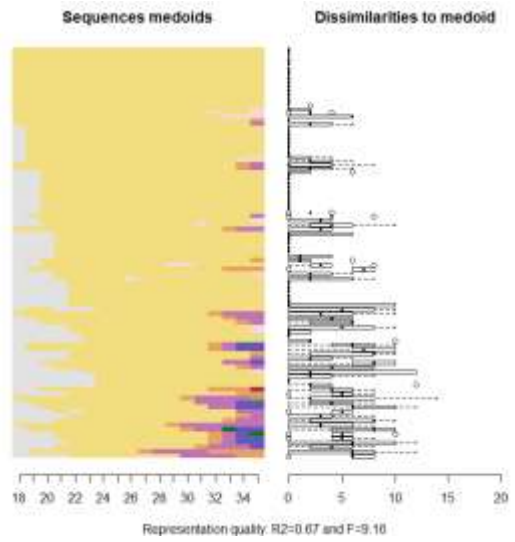
Work & family combined



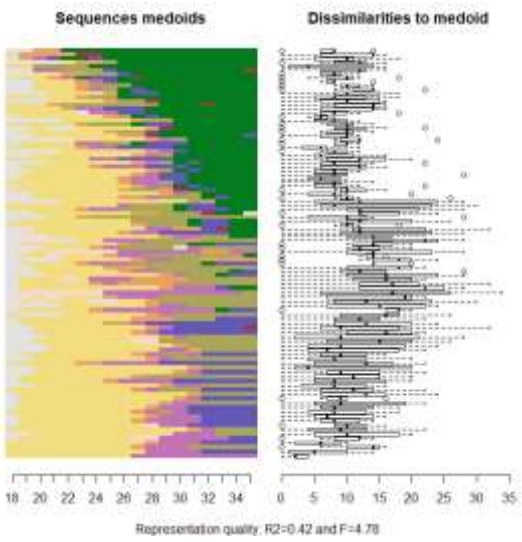
Data: SOEP v34 (1984–2017; unweighted). Notes: horizontal stacked bars depict a selection of representative sequences of combined employment status and children parity states over successive years from age 18 to age 35.

Fig 4. Relative frequency sequence plots of work-family life courses between ages 18 and 35 (Daughter generation)

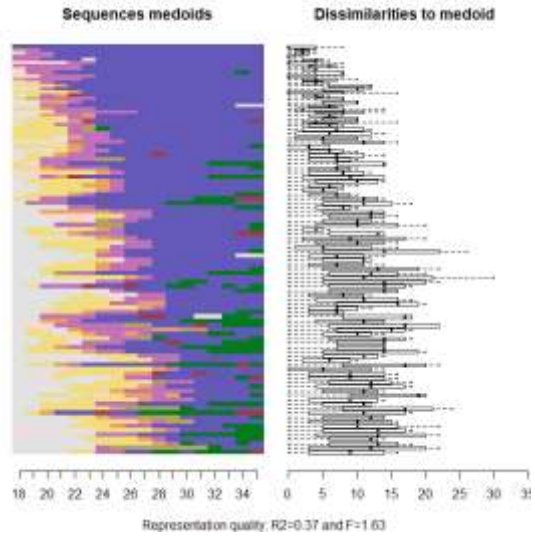
Childless



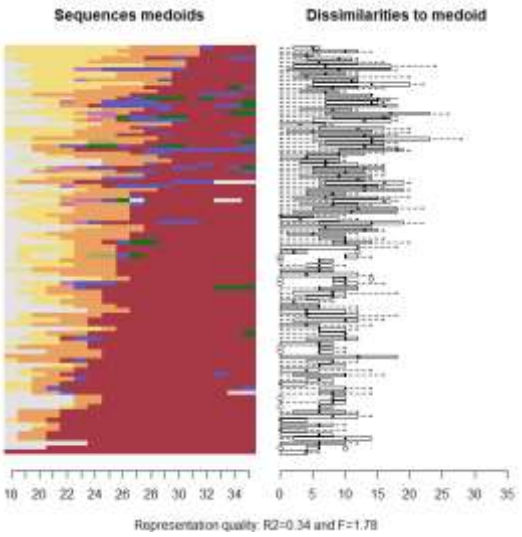
Late family formation



Dis-attachment

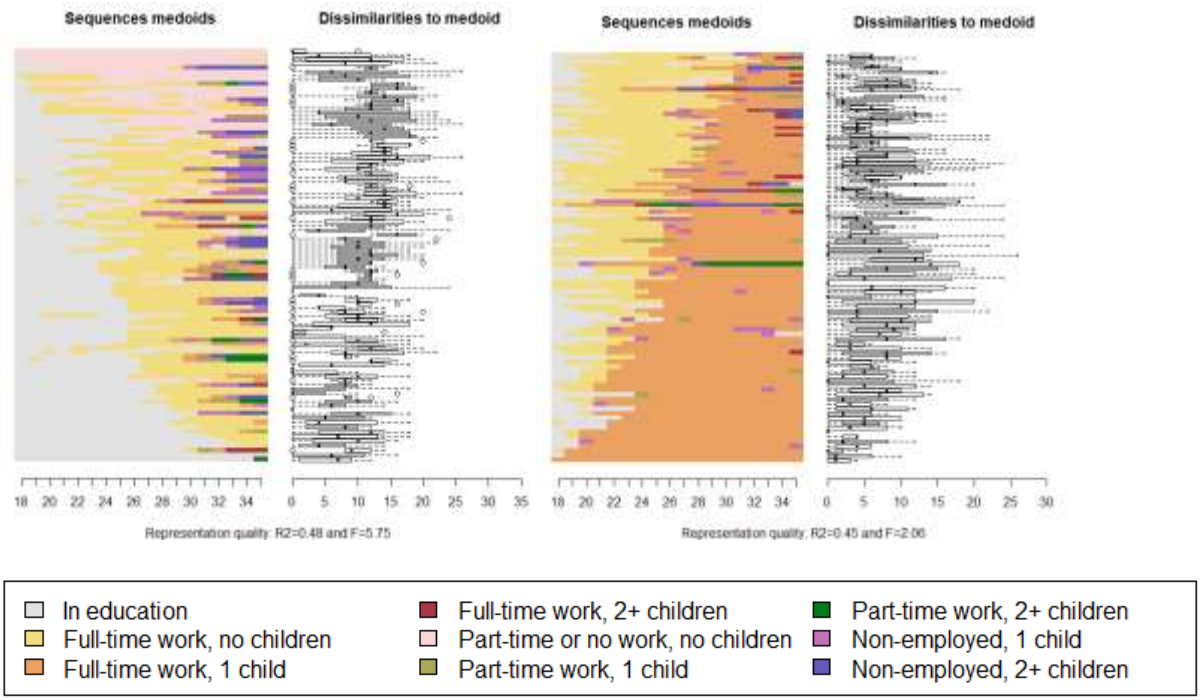


Working mother (2+ children)



Extended Education

Working mother (1 child)



Data: SOEP v34 (1984–2017; unweighted). Notes: horizontal stacked bars depict a selection of representative sequences of combined employment status and children parity states over successive years from age 18 to age 35.

Table 3. Cluster frequencies and characteristics by respondent's generation

	Cluster		Residence in 1989	Mother education	
	N	%	% East Germany	% Interm.	% High
Mother generation					
Stay-home mothers	225	38.5	3.5	20.0	1.8
Work focused	20	3.4	40.0	21.1	15.0
Return to part-time work	45	7.7	11.1	20.0	13.3
Late work dis-attachment	161	27.6	23.6	24.8	11.1
Work and family combined	133	22.8	37.6	21.1	18.0
Overall	584	100	18.6	21.7	9.4
Daughter generation					
Childless	230	34.7	20.0	22.6	4.3
Late family formation	144	21.8	12.5	16.0	6.3
Dis-attachment	63	9.5	12.7	11.1	1.6
Working mothers (2+ children)	30	4.5	26.7	20.0	6.7
Extended education	142	21.4	16.9	28.9	23.9
Working mothers (1 child)	53	8.1	26.4	15.1	5.7
Overall	662	100	17.8	20.7	9.1

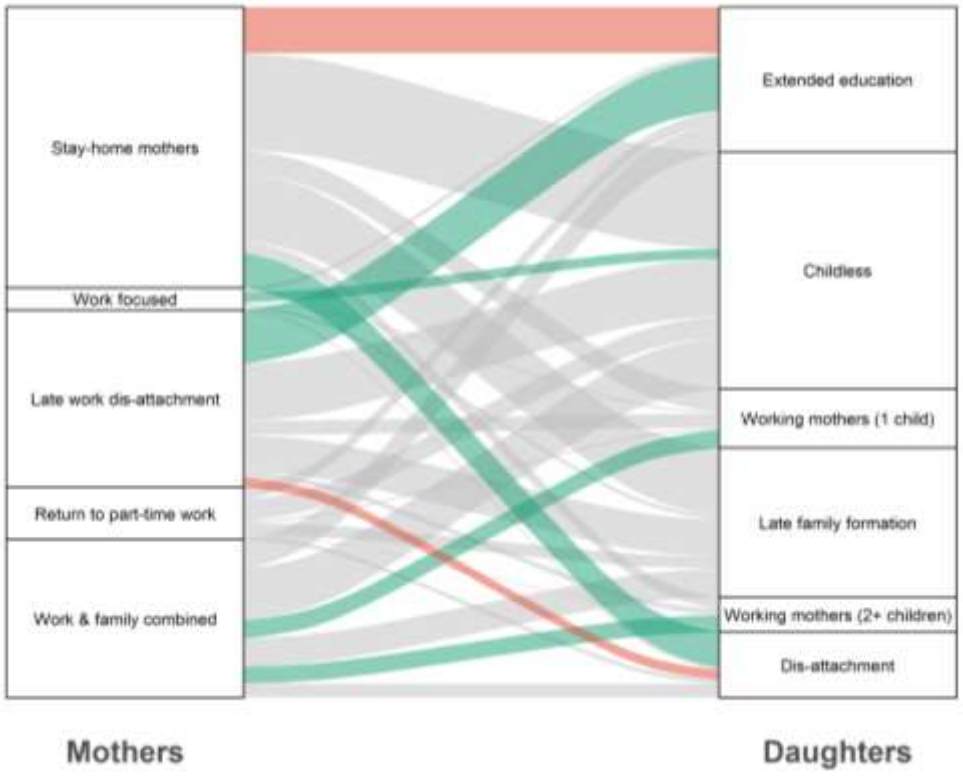
Data: SOEP v34 (1984–2017; unweighted).

Some (relatively smaller) work-family trajectory patterns of the daughter generation partly resemble those of the mother generation, despite daughters' trajectories being more complex. The daughter's "dis-attachment" pattern (9.5% of daughters) features interruptions from full-time employment after childbirth combining non-employment spells with returns to part-time employment. This is a typical pattern among daughters from West Germany, resembling the "stay-at-home mothers" pattern of the mother generation. The daughters' pattern "working mother (1 child)" (8.1%) resembles the mother's pattern "work-focused" in that women only have one child and return to full-time employment after a short childbirth interruption. The patterns differ in that daughters have children earlier and have mothers who are relatively less educated than women in the "work-focused pattern." Similarly, the daughter's "working mothers (2 children)" pattern (4.5%) also features high fertility and post-childbirth full-time employment as in the mothers' "work and family combined" pattern but features more employment interruptions and relatively less educated mothers as well. The three (relatively larger) remaining daughters' patterns feature lower resemblance with those of the mother generation. One sizeable pattern ("childless," 34.7%), featuring women who spent most of the time in full-time work and remained childless up to age 35, did not appear in the mother generation. Another pattern featured "extended education" (21.4%) with late entry into employment and delayed childbearing. This was typical among daughters with highly educated mothers. Last, a pattern of "late family formation" (21.8%) features a generalized delay in the transition to first child, with diverse employment situations of lower work intensity after childbirth. It is worth noting that the starker delays in family formation that is common among these three patterns contribute to the appearance of contrast between them and those of the mother generation.

In what follows, we examine the correspondence between work-family trajectory patterns of mothers and daughters to examine whether and in what respect typical maternal life courses are related to typical (but potentially different) daughters' life courses. Figure 5

shows the relationships between mothers' and daughters' work-family trajectory patterns. The width of the links between types of trajectories indicates the relative number of dyads with the linked patterns in the mother and daughter generation. Information from the underlying cross-tabulation of mothers' and daughters' clusters of work-family trajectories presented in Table 4 support the examination of specific correspondences. We consider an association statistically relevant if the cell contains 8 observations or more, and contributes to the chi2 (i.e. independence test) by at least one unit.

Fig 5. Correspondence between mothers' and daughters' work-family trajectory patterns



Data: SOEP v34 (1984–2017; unweighted)
Note: Red links indicate statistically significant negative associations, green links indicate statistically significant positive associations, gray links indicate statistically insignificant associations.

We find preliminary evidence for a correspondence of patterns across generations in our data. Women in the pattern of "stay-home mothers" are more likely (than expected by

chance) to have daughters in the relatively similar pattern of "dis-attachment" and are less likely to have daughters in the pattern of "extended education". Daughters of mothers in the "late work dis-attachment" pattern—who display low and delayed fertility—are more likely to be in the "extended education" pattern than would be expected by chance. At the same time, daughters of mothers in the "late work dis-attachment" pattern are less likely to be in the "dis-attachment" pattern which features much earlier childbearing-related work dis-attachment. Mothers in the "work and family combined" pattern—who combine high fertility with full-time work—are more likely to have daughters that stay in employment after childbirth: "working mothers (2+ children)" and "working mothers (1 child)" pattern. Finally, mothers in the "work-focused" pattern are more likely to have daughters in the "childless" pattern, which features more career-focused women with fertility postponed over age 35.

Based on the inspection of the data, we find correspondence between mothers' and daughters' patterns, which are comparable in terms of sequence structure or in the focus on either family or employment without being directly similar. We clearly see this common focus in the correspondence of continued non-employment after childbirth in daughters' patterns with the mothers' "stay-at-home-mothers" pattern, and the correspondence of full-time employment after childbirth in daughters' patterns with the mothers' "work and family combined" patterns. That is, evidence suggests that mothers who are similar to each other in their work-family trajectory pattern tend to have daughters who are similar to each other in their work-family trajectory pattern. We also find correspondence between mothers' and daughters' patterns that, in appearance, have neither resemblance nor similar focus with any of the mothers' patterns. For instance, daughters with life courses featuring "extended education" patterns are likely to have mothers with shorter time in education, earlier childbearing, and who showed little work intensity after (late) childbearing ("late work dis-attachment pattern"). Arguably, the influence of mother's on daughter's trajectories accounts

for differences in the context of opportunities. Since mothers had a relatively high work-attachment before childbearing, this could affect daughter's decisions with regards to education and fertility timing. All in all, these results suggest that despite the overlap between persistence and correspondence, these measures also capture different types of intergenerational interdependence.

Table 4. Cross-tabulation of frequencies of mothers' and daughters' work-family trajectories

		Daughters						
Mothers		Childless	Dis-attachment	Late family formation	Extended education	Working mothers (1 child)	Working mothers (2+ children)	Total
Stay-at-home mothers	observed	93	**35**	66	**46**	20	12	272
	expected	94.5	**25.9**	59.2	**58.3**	21.8	12.3	
Work-focused mothers	observed	**10**	2	2	4	2	0	20
	expected	**6.9**	1.9	4.4	4.3	1.6	0.9	
Late work dis-attachment	observed	56	**8**	36	**52**	14	4	170
	expected	59.1	**16.2**	37	**36.5**	13.6	7.7	
Return to part-time work	observed	21	4	12	12	1	0	50
	expected	17.4	4.8	10.9	10.7	4	2.3	
Work & family combined	observed	50	14	28	28	**16**	**14**	150
	expected	52.1	14.3	32.6	32.2	**12**	**6.8**	
Total	observed	230	63	144	142	53	30	662

Data: SOEP v34 (1984–2017; unweighted).
Note: cells with 8 cases or more and with a contribution to the Pearson's chi-square of 1 or more are in bold.

To quantify the overall associations between mothers' and daughters' clusters we use the Cramér's V, which is bounded between 0 and 1, where a higher value indicates a stronger association (see Table 5). For our related dyads sample, we find a small association of 0.12.

The 95% confidence interval does not include 0. Thus, we find evidence of small and statistically significant correspondence in our data.

Table 5. Measures of correspondence between typical patterns in the mother and daughter generation

		χ^2	p-value	Cramér's V	95% CI for V	
					LB	UB
Total		39.07	0.01	0.12	0.09	0.16
Region						
	East Germany	18.12	0.58	0.20	0.13	0.26
	West Germany	38.41	0.01	0.13	0.09	0.17
Maternal education						
	Low	24.76	0.21	0.12	0.08	0.15
	Intermediate	22.99	0.29	0.20	0.13	0.28
	High	14.75	0.79	0.25	0.15	0.35
Daughter's education relative to maternal education						
	Lower	17.08	0.65	0.33	0.22	0.44
	Equivalent	29.57	0.08	0.17	0.11	0.22
	Higher	22.95	0.29	0.13	0.08	0.18

Data: SOEP v34 (1984–2017; unweighted)
Note: Confidence interval for Cramér's V based on bootstrap with 1,000 replications.

We also compute measures of association for different social groups. We note that based on the χ^2 test, we cannot reject the null of statistical independence between mothers' and daughters' work-family trajectories in most groups, particularly those with small sample sizes. We thus consider the resulting Cramér's V estimates as suggestive evidence of the effect sizes. We find that differences in correspondence between East and West Germany (defined by mother's residence) are not substantive. Although the point estimate for the Cramér's V is larger for East Germany than for West Germany, the 95% confidence intervals overlap.

Differentiating the sample by mothers' education shows substantially stronger correspondence among mothers with intermediate and high education compared to mothers with low education. For mothers with high education, their trajectories are associated with

their daughters' trajectories with 0.25 (0.20 for mothers with intermediate education), while for mothers with low education the association is only 0.12. The 95% confidence intervals for mothers with high and low education do not overlap. Similar to intergenerational persistence, the correspondence between typical trajectories of each generation is stronger with maternal education.

Differentiating the sample by daughter's relative education to their mothers shows similar levels of correspondence between daughters featuring higher (0.13) and equivalent educational mobility (0.12). The 95% confidence intervals overlap. Again, we find that women's work-family trajectories are not more influenced by their mother's trajectories if they experienced educational immobility. As an exception, we find higher levels of correspondence for the group of daughters attaining less education than their mothers. The Cramér's V of this group is 0.33 and the 95% confidence interval does not overlap with those of the other groups. However, the result should be taken with caution due to small sample size.

Conclusion

Despite fundamental changes in work and family life courses across generations, fragmented research evidence suggests that women's family behaviors as well as work outcomes are interdependent across generations. In the present study, we adopt a holistic life course approach to acknowledge that individuals' multidimensional lifetime choices are interconnected and interdependent with the lives of others. We propose and examine two complementary measures of the interdependence (persistence and correspondence) of combined work-family life courses among two generations of women within the same families drawn from the German Socio-Economic Panel. We deploy dyadic sequence analysis to study intergenerational associations of life course patterns from age 18 to 35. Specifically, we examine whether mothers' work-family trajectories persist into the next

generation, and whether we can identify any correspondence of typical trajectory patterns that are specific to each generation. We also assess whether these associations vary across socio-political contexts and social background.

To address the extent to which patterns of mothers' work-family life courses persist, we first assess similarities of sequences of combined work and family states across women from two generations. On average, one-third of the mothers' trajectories persist in the daughter generation. This relatively modest resemblance of mothers' and daughters' trajectories was to be expected, given that life courses underwent substantial changes across the generations under study. It was our interest to assess the extent to which intergenerational persistence operates within the family—through various mechanisms of reproduction—beyond the relevant societal processes that underlie continuity and change in life courses. To this end, we compared similarity within related dyads (consisting of a mother and a daughter) with similarity within unrelated dyads (consisting of a mother and a random, unrelated woman in the daughters' birth cohort). Our results show significantly larger average similarity among related dyads than among unrelated dyads, suggesting that persistence partly operates through family-related mechanisms.

This finding aligns with previous research on the intergenerational reproduction of family trajectories. For the United States, Liefbroer and Elzinga (2012) found that about 20% of the persistence in family trajectories from parents to children (of any gender) is due to family-specific processes. In our analyses, this percentage is similar (15%), despite the fact that we only examine women's trajectories and also account for the work domain, which has shifted dramatically across generations because of educational expansion and massive entry of women in the labor force. We note, however, that one should keep in mind that 85% of the persistence in mother's trajectories might be operated through wider societal processes of stability in women's life courses. This partly includes gender inequalities in public and private spheres that keep women from following non-gendered life courses.

Second, we examine associations across typical patterns that are specific to each generation (intergenerational correspondence). Our results suggest that the overall levels of correspondence are significant but modest. Results also show evidence of correspondence between mother/daughter patterns where the family or work orientation of the trajectories was reproduced—without daughters necessarily reproducing their mothers' trajectories. We also find some correspondence across mother/daughter patterns that had less or no apparent common trajectory focus. This in part reflects the fact that most daughters followed three typical contemporary patterns (i.e., childlessness, extended education, and later family formation) that show little resemblance with any of the typical patterns of the mother generation, at least up to age 35.

These findings support our notion of similar but different life courses, and unveil subtler ways of reproduction of work-family life courses than have so far been proposed in the literature. To date, the bulk of the literature has focused on assessing exact matches or similarity in the trajectories of mothers and daughters—what we called persistence. The idea of correspondence, by contrast, suggests that two women with similar trajectories will have daughters with similar trajectories—without daughters' trajectories necessarily resembling their mothers'. We propose that such a correspondence addresses mechanisms of intergenerational interdependence of life courses that cannot be addressed by measuring only exact or similar outcomes across generations, for instance when life courses of each generation were supported by different institutions. It can be understood as a type of family transmission that is sensitive to the conditions of the daughters' socio-historical order. It aligns with existing evidence that suggest that mothers may support daughters in adopting life courses that are normatively important in a given context despite less resemblance with the mothers' own life course choices (see e.g. Bernardi and Oppo 2008).

We addressed the role of individual endowments examining variation in the intergenerational associations in work-family trajectories by maternal education and

daughters' educational mobility. We found higher levels of intergenerational interdependence (persistence and correspondence) with increasing maternal education. Similar associations were found in related research addressing intergenerational correlations of family trajectories in Germany (Fasang and Raab 2014; van Winkle et al. 2016). It was noted that mothers with higher educational attainment influence their daughters through the transmission of social status as well as through more effective socialization. However, our results on the intergenerational persistence of intermediate and highly educated mothers' trajectories might largely result from societal processes of intergenerational continuity, given that the average similarity of unrelated dyads was also substantial. These results suggest that core elements of the work-family trajectories of the few mothers attaining higher levels of education (e.g., longer spells of education, full-time employment, and postponed and smaller families) have gained popularity among larger shares of women in the daughter generation. In contrast, we did not find substantive differences in intergenerational persistence and correspondence by daughter's educational mobility. This does not lend support for our expectation that work and family life courses of mothers and daughters develop more differently when daughters achieve higher educational attainment than their mothers. It suggests that changes in work-family trajectories were also widespread in the absence of social mobility (proxied by education).

We also investigated the intersections of these intergenerational associations in work-family trajectories across socio-political contexts—examining variation between mothers and daughters in West Germany, a context of institutional continuity across generations, and mothers and daughters in East Germany, a context of institutional contrast across generations. We did not find significant differences in intergenerational persistence or correspondence in work-family trajectories across East and West Germany. This result contrasts with previous findings of lower persistence in intergenerational family patterns in East Germany (Fasang and Raab 2014; van Winkle et al. 2016). Despite changes in family formation and the

adoption of West German institutions, some intergenerational continuity in work-family roles may have been expected in East Germany because they were supported by infrastructures (e.g. early childcare institutions) and a working mother normative script that did not completely fade away. Next, we do find that persistence partly operates through the family in West Germany, but not in East Germany. This suggests that in the West German context of relative institutional stability across generations, mothers' trajectories have a stronger influence on their children's trajectories. It follows that relevant mechanisms, such as transmission of social status or socialization, were found to be more effective in West Germany than in East Germany, even after reunification (Goldstein and Kreyenfeld 2011; Pollak 2011). Alternatively, one could argue that the trajectories of mothers in East Germany were forged in a context of dominant egalitarian gender ideology, which may have gained popularity in the wider contemporary society over typical trajectories of mothers in West Germany, where a male breadwinner model prevailed.

We note some limitations of our study and avenues for future research. Owing to the high data requirements for our analyses (i.e., work and family histories of mothers and daughters from age 18 to 35), we could not draw related dyads for all women of each generation from the original sample, which keeps us from making strict inferences regarding the general population. In addition, we note that some sub-group analyses (i.e., highly educated mothers) should be replicated with larger sample sizes than the ones available to us. Future research could further elaborate on the relevance of persistence and its connection with correspondence, and to address the extent to which persistence conflates the persistence of traditional (gendered) patterns of the bulk of mothers as well as the diffusion of novel patterns of some pioneering mothers (e.g., highly educated mothers who postpone family formation) into the next generation. As we find three large clusters in the daughter generation with late or no family transitions, research should assess longer life spans (e.g. up to age 45) to address how further fertility postponement explain the correspondence between

intergenerational patterns. Such research could profit from advancements in fuzzy clustering methods which address the degree of fit of each sequence in each cluster. Finally, future research should investigate the specific mechanisms that operate for the intergenerational interdependence among women's long-term trajectories that our research has unveiled. Understanding such mechanisms is useful when designing policies that support equal opportunity over the life course.

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