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Beyond the nuclear family: Personal networks in light of work-family trajectories

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ABSTRACT

Individuals develop personal networks in a cumulative way over the life course, with early adulthood being a critical period with multiple transitions relating to family formation and entry into the labour market. Existing research on personal networks and the life course usually stresses the impact of single life transitions and events on the composition of personal networks. Contrastingly, this paper investigates the impact of whole work-family trajectories over a retrospective time period of 20 years corresponding to early adulthood (roughly 20 to 40 years old) on the composition of personal networks. Drawing on a Swiss sample of individuals born between 1970 and 1975, results revealed the critical impact of the family trajectories for the development of personal networks, and showed how the current diversity of personal networks is accounted for by trajectories deviating from the family developmental model.

1. Introduction

Research addressing life course factors shaping personal networks for the most part focus on single life transitions and events (Wingens et al., 2012). They usually stress the variation of network composition and structure according to the life stage in which respondents are at the time of the interview (McDonald & Mair, 2010). Although consequential, this literature has left uncharted the global structural processes encapsulated in life trajectories. Defined as “life course dynamics that take place over an extended period of time” (Macmillan, 2005, p. 5), life trajectories encompass events and transitions, and delineate social pathways associated with ageing. Life trajectory is an overarching concept that stresses the time related, systemic nature of the interactions existing between singular events, transitions and stages (Aisenbrey & Fasang, 2010). It is defined as a chronological variation of the social statuses held by an individual in various life spheres, such as family and work (George, 1993; Levy & Bühlmann, 2016), and stress their interdependencies on the long run (Gauthier, Widmer, Bucher, & Notredame, 2010). Taken a step further, the recognition of these “linked ecologies” provides explanatory models to be empirically tested for how the accumulation of past actions become the facilitators or constraints of the next round of action (Abbott, 2016; Dannefer, 2003).

This cumulative effect of past actions on the present is likely to be strong on the realm of personal relationships. Over the life course, individuals develop a series of relationships in the family and the workplace. Individual life trajectories create, modify, or terminate a wide array of social roles and relationships associated with those two life spheres (Levy & Bühlmann, 2016) potentially leading to a diversity of personal networks. Consider two different young adult life trajectories: one in which an individual experienced an early marriage, swiftly followed by a long stage of parenthood and a full withdrawal from the labour market; and a second in which another individual did not build a long term partnership, had no child, and has worked full-time since the end of the educational stage. The first trajectory with its standardised family stages corresponds to the family developmental model, while the second one represents an alternative. The family developmental model features a set of ordered, and age-graded stages based on corresponding developmental tasks, supposedly followed by a large majority of individuals in the second half of the 20th century: establishment of the couple, living with preschool children, with school age children, with adolescents, launching of adult children, post-parental, and retirement phases (Aldous, 1990; Duvall, 1957; Widmer & Gauthier, 2013). These two distinct trajectories are likely to differentially affect which of family and work pools of sociability the individual tends to favours for the drawing of personal network members. Trajectory analysis offers network researchers the ability to go beyond the effects of specific life transitions in distinct life spheres by considering the overall logic of life development, to which specific life transitions in various spheres belong.

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1. Development of personal relationships over the life course

Early adulthood is a key life period for the shaping of personal networks, as it includes a series of crucial transitions in the family and work spheres. The proximity principle (Festinger, Schachter, & Black, 1950; Newcomb, 1960) stresses that individuals tend to keep significant relationships with people who have been spatially close to them and with whom they have had frequent face-to-face interactions at some crucial points of their life course. The convoy model (Antonucci & Akiyama, 1995) states that such relations may remain significant for life, depending on their functional importance (presence of support and exchanges) and their structure (high frequency of contact, spatial proximity).

Individual life trajectories encompass four interdependent dimensions that may have an impact on personal networks by increasing the functional importance and changing the structural features of specific relationships, namely the timing, ordering and reversibility of life events and transitions, along with the duration of the phases they delineate (Modell, Furstenberg, & Hershberg, 1976). Timing refers to the age at which a significant change in a trajectory occurs. For instance, women may become parents at the early age of 20, at the currently mean age of 30, or at the later age of 40. Since the early twenties are overwhelmingly characterised by high sociability (Degenne & Lebeaux, 2005), early parenthood may shorten this period of outward sociability, or even suppress it, with likely consequences for personal networks later on in life. Ordering refers to the chronological sequence of changes within a trajectory. For instance, childbearing may happen prior to marriage or after, as well as outside wedlock (Perelli-Harris et al., 2012). When individuals experience non-standard ordering (e.g., having a child while studying), they may face institutional contradictions and/or social disapproval and, hence, be at risk of social isolation. Reversibility within a trajectory refers to the possibility of re-holding a previous status, a feature that has become increasingly common in late modernity (Bidart & Lavenu, 2005). Divorce and remarriage are good examples of status reversibility. While marriage may contribute to the interlocking of conjugal networks, divorce may contribute to their disruption (Terhell, Broese van Groenou, & van Tilburg, 2007). Finally, duration refers to the time spent without significant change in the trajectory. Duration is necessary in order to develop significant relationships with network members (Antonucci & Akiyama, 1995; Granovetter, 1973; Wellman, 1999).

1.2. Personal relationships in early adulthood and work-family trajectories

Family relationships are subjected to major changes in early adulthood. Partnership becomes central during that time period and triggers a reconfiguration of all other relationships (Aeby, Widmer, & Carlo, 2014; De Singly, 1996; Widmer, 2010). Cohabiting with a partner implies mixing the two partners’ networks (Bryant & Conger, 1999). With marriage and parenthood, this interlocking process deepens and spreads out (Kalmijn, 2003). The resulting time pressure and increased workload falling on new parents imply structural constraints that may shift the focus from parents and siblings to the partner and children (White, 2001). Despite changes in the composition, the family network size remains stable over time in contrast to other types of ties (Wrzus, Hänel, Wagner, & Neyer, 2013).

It was found that while family ties are often mentioned in the first position of importance, non-kinship ties such as friends or colleagues appear significant as well (Pahl & Spencer, 2004). Early adulthood has become a period of tertiary education for some individuals, and, as such, provides students with opportunities to develop new friendships (Degenne & Lebeaux, 2005; Wrzus et al., 2013). Increasing education is associated with a higher number of network members, and a larger share of non-family members (McPherson, Smith-Lovin, & Brashears, 2006). Finally, it should be noted that there are gender differences in network composition. Women tend to include a larger proportion of kin and, consequently, they are often described as the kin-keepers, a role which goes hand in hand with the home-carer role (McPherson et al., 2006; Moore, 1990; Wellman, 1999).

Family and work trajectories have become more pluralised in younger cohorts (Brückner & Mayer, 2005; Kapella, Rille-Pfeiffer, Rupp, & Schneider, 2010) due to the increasing share of individuals not experiencing certain transitions such as marriage, parenthood and its associated early partial disengagement from the labour market for many women, and to the increasing share of individuals experiencing alternative transitions (divorce, remarriage and unstable or partial engagement in the labour market). Some individuals do not experience parenthood, and childlessness also impacts sociability patterns (Keim, Klärner, & Bernardi, 2013), favouring a focus on friends and extended kin (Schnettler & Wöhler, 2016). Cohorts reaching adulthood in the nineteen fifties followed a chronologised and ordered set of stages and transitions from leaving the parental nest, marrying and having children, to the family stage after retirement (Aldous, 1990). Family trajectories of younger cohorts, on the other hand, are much more varied in terms of timing, ordering, and reversibility of family transitions, as well as regarding the duration of each family stage. Trajectories corresponding to the family developmental model (Aldous, 1990; Duvall, 1957; Widmer & Gauthier, 2013) are likely to grant a greater importance to members of the family household (or the so called “nuclear family”) because of the long-lasting co-presence and functional importance of such members. Likewise, a focus on family work rather than on participation in the labour market is likely to reinforce the focus of personal networks on members of the family household.

Finally, as life trajectories are shaped by national contexts (Billari, 2004; Brückner & Mayer, 2005), it is necessary to briefly consider the structural specificities of Switzerland when dealing with the impact of life trajectories on personal networks. Switzerland has developed a welfare regime with conservative and liberal components ensuring somewhat limited individual entitlements, especially regarding family policies expenditure (Arts & Gelissen, 2002; Obinger, 1998). Switzerland is also characterised by a modified male breadwinner model, meaning an one-and-a-half-earner model in which most men work full-time and most women part-time, especially after the birth of the first child (Levy & Widmer, 2013), often leading to a gendered family-work conciliation (Esping-Andersen, 2009). This context may reinforce the role of women as kin-keepers, and lead to a focus on the nuclear family in women’s networks, especially when they are mothers.

Bearing those elements in mind, this paper hypotheses that work-family trajectories in early adulthood have an impact on the composition of personal networks. The variability of the timing of transitions in cohorts having experienced early adulthood after the nineteen sixties, their ordering and reversibility, and the duration of stages, are likely to make this process highly variable, especially for the family trajectories. We therefore expect trajectories which match the developmental model of family stages to favour a focus of the personal network on the family household members. Alternatively, family trajectories which deviate from the family developmental model should favour a focus on people outside of the family household. As for work trajectories, we expect that individuals who have continuous full-time work trajectories to develop more open networks, less focused on family members and including more colleagues and friends, as the social spheres in which they participate are more varied.
2. Methods and measurements

2.1. Sample

A sub-sample of the Swiss survey *Family tmes* was used. It is composed of individuals born between 1970 and 1975 who were aged between 36 and 41 at the time of the data collection (*n* = 3821). The *Family tmes* survey was administered in 2011 to a representative sample of 803 individuals living in Switzerland (see Wall, Widmer, Gauthier, Cesnuityté, & Gouveia, 2018). Recruitment was handled through the population register of the Swiss Federal Statistical Office (SFSO) to randomly select individuals representative of all three major linguistic regions of Switzerland and who were born either between 1970 and 1975 or between 1950 and 1955. Face-to-face interviews using a computer-assisted personal interviewing method along with a paper life history calendar were conducted by survey institute employees at the home of the respondents; each interview lasted about one and a half hours.

Comparing the characteristics of individuals who were interviewed (*n* = 803) to the SFSO sample (*n* = 2044), no statistical difference in participation was found regarding linguistic region, birth cohort, or gender, but Swiss citizens and more educated people were slightly over-represented. It should be noted that under-representation of foreign minorities is quite common in Swiss surveys (Lips, Laganà, Pollien, & Gianettone, 2013). The sub-sample of individuals born between 1970 and 1975 was 53% female and 74% Swiss citizens (see Table A1 in Appendix). Regarding education level, 8% of the respondents had a lower secondary education, 7% an upper secondary education, 63% a vocational education, and 22% a tertiary education. Given the topic of interest of this paper, we will also describe the demographic reservoir for the nuclear family ties. Most respondents still had living parents (96%) and siblings (91%). The majority also had a partner (88%) and children (75%).

2.2. Methodological approach

We built two typologies: one of personal networks and one of work-family trajectories, which we both described in details below. For each typology, we first present the instruments and methods used to collect and analyse the data (e.g., network name generator; sequence analysis and life history calendar) and then explain the typology procedure. In the results’ section, using the aforementioned typologies, the impact of work-family trajectories on types of personal networks was then assessed by means of logistic regressions, including a set of socio-demographic covariates. All computations were made using the R statistical environment (R Development Core Team, 2011), specifically, the package TraMineR for sequence analysis (Gabadinho, Ritschard, Müller, & Studer, 2011).

2.3. Network measurements

Respondents (egos) were asked to list their significant others (*alters*) by answering the question: “Who are the individuals who, over the past year, have been very important to you, even if you have not got along well with them?” This name generator based on a free-listing technique has been tested in several studies (Widmer, Aeby, & Sapin, 2013). Importance was attributed to people who had played a significant role in the respondents’ lives. Respondents could name up to 20 significant alters. For every alter, respondents were asked to indicate what type of ties it was, choosing from an extensive list of 51 personal ties printed on a showcard. This name generator has specific features stemming from a configurational perspective on social ties (Widmer, 2010). First, it refers to strong ties (Granovetter, 1973) and the network core, as strong ties matter more for individual development throughout the life course (Antonucci & Akiyama, 1995). Second, it focuses on the composition of personal networks rather than on social resources (Van Der Gaag & Snijders, 2005) as the link between life trajectories and personal networks is based, in our view, on positions in the social structures and, therefore, on social statuses and roles. Third, this name generator emphasises the possibility of mentioning also negative interactions. Indeed, personal networks constitute configurations of positive and negative ties (Fingerman, Hay, & Birditt, 2004; Widmer, 2010). The choice of such a name generator has some methodological implications influencing the outcomes, especially network size as such networks tend to be small (Eagle & Proeschold-Bell, 2015; Marsden, 2011).

2.4. Personal network typology

The typology of personal networks was built based on the different personal ties cited by the respondents to account for the diversity of arrangements. Table 1 shows the list of the most cited types of ties by the respondents. At the top of the list, respondents mentioned a partner (77.1%), parents (48.5%), friends (48.2%), children (35.3%), and siblings (30.9), with a higher share of female alters.

Following previous analytical procedures on similar datasets (Widmer, 2010; Widmer et al., 2013), from the initial list of personal ties (see Table 1), we kept 13 ties corresponding to those mentioned by at least 4% of the respondents and the other ties (stepfamily members, siblings-in-law, other non-kin members, fictive kin, and grandparents) were gathered into a 14th residual category named Other. Principal components analysis using varimax rotation was conducted on the 14 categories. Following the standard practice for factor analysis (Tabachnick & Fidell, 1996), we retained seven components that accounted for 62% of the explained variance. The scores of the seven principal components were in-putted into a hierarchical clustering analysis based on a measure of the Euclidean distance between individuals and on the Ward clustering algorithm (Ward, 1963). We retained a solution with seven clusters, chosen because of its balance of interpretability and statistical efficiency (Borgen & Barnett, 1987; Everitt, Landau, Leese, & Stahl, 2011). Table 2 presents the average number of citations for each tie

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1 When computing personal networks the sample slightly reduces (*n* = 372) because the data for 10 respondents were excluded due to poor data collection quality of the network module. The problem laid in the phrasing of the prompting question, but was restrained to only one interviewer and the 10 interviews s/he completed.

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*9 respondents did not cite any significant alter.
Table 2
Types of personal networks (average number of citations for each tie, by type).

|          | Procreation | Orientation | Siblings | Kinship | Male friends | Female friends | Occupational | Sparse |
|----------|--------------|-------------|----------|---------|--------------|---------------|--------------|--------|
| n        | 84           | 70          | 51       | 42      | 63           | 31            | 22           | 9      |
| Partner  | 0.88         | 0.90        | 0.88     | 0.81    | 0.78         | 0.00          | 0.68         | 0      |
| Parents  | 0.58         | 1.53        | 0.45     | 0.88    | 0.17         | 0.35          | 0.50         | 0      |
| Mother   | 0.38         | 0.89        | 0.25     | 0.50    | 0.13         | 0.26          | 0.18         | 0      |
| Father   | 0.20         | 0.64        | 0.20     | 0.38    | 0.05         | 0.10          | 0.32         | 0      |
| Friends  | 0.11         | 0.74        | 1.43     | 0.43    | 1.54         | 1.55          | 0.77         | 0      |
| Female friend | 0.05   | 0.50        | 1.22     | 0.29    | 0.24         | 1.13          | 0.36         | 0      |
| Male friend | 0.06    | 0.24        | 0.22     | 0.14    | 1.30         | 0.42          | 0.41         | 0      |
| Children | 2.25         | 0.13        | 0.25     | 0.43    | 0.24         | 0.16          | 0.36         | 0      |
| Son      | 1.11         | 0.09        | 0.04     | 0.17    | 0.17         | 0.13          | 0.27         | 0      |
| Daughter | 1.11         | 0.04        | 0.22     | 0.26    | 0.06         | 0.03          | 0.09         | 0      |
| Siblings | 0.19         | 0.37        | 1.47     | 0.43    | 0.06         | 0.26          | 0.18         | 0      |
| Sister   | 0.12         | 0.20        | 0.67     | 0.33    | 0.03         | 0.19          | 0.09         | 0      |
| Brother  | 0.07         | 0.17        | 0.80     | 0.10    | 0.03         | 0.06          | 0.09         | 0      |
| Colleagues | 0.01      | 0.00        | 0.02     | 0.02    | 0.00         | 0.03          | 1.41         | 0      |
| Collaterals | 0.06    | 0.04        | 0.02     | 0.31    | 0.00         | 0.42          | 0.05         | 0      |
| Ex-partner | 0.04       | 0.00        | 0.00     | 0.02    | 0.02         | 0.39          | 0.05         | 0      |
| Parents-in-law | 0.00 | 0.00       | 0.06    | 0.48    | 0.00         | 0.00          | 0.00         | 0      |
| Other    | 0.02         | 0.00        | 0.04     | 0.90    | 0.00         | 0.03          | 0.05         | 0      |

across personal networks. The labels of the networks are chosen to reflect the standpoint of the focal person, i.e. the respondents in relation to their network members. Labels represent the main orientation of the networks, but do not exclude the presence of other ties. For instance, partners were mentioned by a large majority of respondents and, thus, were present in many networks regardless of their main orientation indicated by the label. The first type of network was centred around the respondents’ partner (average number of citations: 0.88) and the children (overall 2.25; sons 1.14 and daughters 1.11); thus, we named it Procreation family. It refers to the so called “procreation family” as defined by Parsons, Bales, and Olds, (1956) as the prototype of the modern family. Then, one other type, the Orientation family network, refers to the nuclear family of origin, the so called “family of orientation” (Parsons, 1943) by including respondents’ parents (overall 1.53; mothers 0.89 and fathers 0.64). The Sibling network included respondents’ siblings (overall 1.47; brothers 0.80 and sisters 0.67). Both Orientation family and Sibling networks often included also a partner (respectively 0.90 and 0.88), but seldom children (respectively 0.13 and 0.25). The Kinship network included collaterals (0.31), parents-in-law (0.48), and a significant number of other ties (0.90). The Male friend network included male friends (1.30) and the partner (0.78). The Female friend network focused on female friends (1.13) and did not include the partner (0), though it included an ex-partner in two fifths of the cases (0.39). The Occupational network was centred around colleagues (1.41). In addition, nine individuals did not mention any significant relationships and constituted the so called Sparse network. To summarise, eight personal networks were uncovered, with the following order of importance: Procreation Family (22.6%), Orientation family (18.8%), Male friends (16.9%), Siblings (13.7%), Kinship (11.3%), Female friends (8.3%), Occupational (5.9%), and Sparse (2.4%). Interestingly, no type is quantitatively dominant.

2.5. Sequence analysis

Life trajectories may be efficiently operationalized into empirical variables using sequence data and analysis (Gauthier, Bühlmann, & Blanchard, 2014). Sequence data represents the chronological succession of statuses an individual holds over a certain period of time in a given life domain. Sequence analysis seeks at identifying a limited number of contrasted patterns unfolding over time and to associate them with groups of individuals (Piccarreta, 2017). Time is indeed a necessary variable to understand change (Sorokin & Merton, 1937). As it considers order, timing and duration as interdependent features in a systemic perspective, the correlative notion of trajectory central to the life course perspective is considered theoretically superior to that of transition (Sackmann & Wingen, 2001). However, most quantitative research done so far focus on independent factors derived from aggregated chronological measures, as for instance the age at the transition to parenthood or the number of years outside the labour market (Aisenbrey & Fasang, 2010). This drastic complexity reduction – appropriate for standard survey design – was criticized as it may contribute to evacuate the processual dimension of social life in favour of a bunch of discrete and oriented relations and hence to loose explaining power accordingly and/or to possibly produce causal fallacy (2016, Abbott, 2001; Esser, 1996).

Work-family sequences were constructed using a retrospective life history calendar that recorded for each respondent the dates of all changes in both life domains from birth until 2011, the year of the interview. In order to connect directly the life trajectories of individuals with their personal network (measured at the time of the interview), the window of observation for this study corresponds to the calendar years 1991 to 2011, that is the twenty years directly preceding the interviews, as we are interested in the composition of the personal networks in 2011. For this period, the calendar recorded up to forty time units (semesters). For all respondents, a single co-residence and a single employment status was attributed to each time unit. Sequences of co-residence statuses are a means of describing variations in the household composition over time and, consequently, a common reliable proxy for family trajectories. We retained nine different co-residence statuses according to both their statistical distribution and their sociological relevance: Living with two parents (1), Living with one parent (2), Living with roommates (3), Living alone (4), Living with a partner (5), Living with child(ren) (6), Living with relatives (7), Living with roommates (8), Living in another situation (9). For employment trajectories we retained twelve employment statuses selected on the same criteria: Student (1), Low part-time (2), High part-time (3), Full-time employment (4), Part-time self-employed (5), Full-time self-employed (6), Occasional worker (7), Unpaid family work (8), Unemployment (9), At home (10), Illness / invalidity (11), and Other (12).

Following standard practices (Gauthier et al., 2014), the first step of the analysis was sequence comparison. The main idea of sequence comparison is to use a dynamic algorithm to optimally assess the degree of dissimilarity (called distance) between two sequences of statuses, an operation that cannot be solved using Euclidean distance (Kruskal, 1983; Levenshtein, 1966). Schematically, this distance is computed as the minimal (weighted) sum of elementary operations of insertion, deletion and substitution applied to the elements of a source sequence to transform it into a target sequence; the larger this number, the
greater the distance. When dealing simultaneously with two or more trajectories characterizing the same observation unit, the procedure is similar and named multi-channel sequence analysis or MCSA, (Gauthier et al., 2010). Following previous research (Gauthier et al., 2010), we used unitary substitution costs of 2 and indel costs of 1. In the second step, all pairwise distances between respondents were gathered into a matrix. Finally, a cluster analysis was performed on that matrix in order to group together the most similar sequences, hence forming a typology of individual work-family trajectories (Gauthier et al., 2014; Macindoe & Abbott, 2004). The issue of the number of clusters to retain in the typology is often dealt with by considering two indications. First measures of clustering quality, such as the Silhouette index (Rousseeuw, 1987) indicate which solutions are associated with the lowest intra-cluster and the highest inter-cluster variability. Second, the substantive interpretability of the candidate solutions must be evaluated based on their face value (Lapointe & Legendre, 1994).

2.6. Work-family trajectory typology

Following the procedure described above, a typology of work-family trajectories based on a five-cluster solution was built (see Fig. 1). Index plots presented in Fig. 1 correspond to distinct joined types of work-family trajectories with the co-residence plot in the first row and the corresponding employment plot in the second row just below. The abscissa displays the historical time from 1991 to 2011 measured in semesters. The ordinate indicates the relative distribution of all possible statuses for each semester of the respondents’ lives. This makes it possible to identify the dominant characteristics of each type of trajectories in terms of the timing, ordering, and reversibility of transitions, as well as the duration of stages. Eventually, the resulting visualization helps label the types of early adulthood work-family trajectories.

Having this in mind, one can read from Fig. 1 that there were three types (57% of the sample) characterised by a long stage of family life indicated by the presence of respondents’ partner and children in the household (corresponding to the blue coloured area in the upper graphs of Fig. 1). In these three types, the ordering of the family trajectory includes a stage at the parental home (aggregated mean time (am): 3.2 years (yrs)), followed by a short stage of solo living (am: 1.9 yrs), and a stage of living with a partner (am: 3.6 yrs), before entering a longer stage of family life lasting around 10 years (am: 10.5 yrs) (see Table 3). Whereas these three types were similar regarding family formation, they drastically differ concerning the unfolding of their work trajectories. The first type was associated with full-time employment (mean time “m”: 17.5 yrs) and, thus, was identified as Double investment trajectories (24%). The second type was associated with a partial withdrawal from the labour market (after 6.1 years of full-time employment on average) consisting either in low part-time employment (m: 4.8 yrs) or in home-staying (m: 6.2 yrs) and, therefore, labelled Family-focused trajectories (20%). The third type was associated with a mixed investment in the work sphere combining different employment statuses, in particular higher part-time activities (m: 3.8 yrs), but also self-employed activities (m: 4.0 yrs). We therefore named this type Conciliation trajectories (13%). In those three first types of work-family trajectories, all respondents had children except five of them. Four of these childless respondents were following a Conciliation trajectory, indicating that their non-linear work trajectories weighed more in the clustering procedure. At the time of the interview, a few respondents no longer had a partner (8%).

The fourth type (24%) was characterised by a long stage of solo living (m: 5.7 yrs) followed by a long stage living with a partner of around nine years (m: 8.6 yrs) and by full-time employment (m: 14.1 yrs). Therefore, we named the corresponding trajectories Conjugal / full-time. Despite the clear focus on conjugality in this type, it should be noted that some people enter a family stage at the end of the observed trajectory. The last type (19%) was characterised by a long stage in the parental home (m: 7.3 yrs). For some, this parental stage was followed by solo living, living with a partner and, eventually, a stage of family life of around three years (m: 2.7 yrs). It means that, for those who went through the transition to parenthood, it was postponed in comparison with the three first types, which resulted into a shorter time spent in that new stage. Regarding work trajectories, it was associated with a long time in education (m: 6.6 yrs) before an integration into the labour market on a full-time basis (m: 9.8 yrs). Therefore, we named them Preparation trajectories. Two thirds of the respondents following Conjugal / full-time trajectories (65%) and two fifths of the respondents following Preparation trajectories (41%) did not have children. At the time of the interview, 18% of the respondent in Conjugal / full-time trajectories no longer had a partner, which was the case of 13% of those in Preparation trajectories. Importantly, Double investment and Family-focused trajectories grant a large share of their time span to the nuclear family, either the family of orientation or of procreation (Parsons et al., 1956), as expressed by the dominance of cohabitation with parents, partner and children. Conjugality, Conciliation and Preparation trajectories do not share this emphasis on the nuclear family through time.

The five types of trajectories were significantly associated with gender. The Family-focused type was exclusively female (100%), whereas the Double investment type was predominantly male (82%). Similarly, women were more likely to have followed a Conciliation trajectory (65%) and men a Preparation trajectory (62%). Conjugal and full-time trajectories were the only ones to be gender-neutral. It is congruent with previous results stressing the gendered nature of work trajectories in Switzerland (Levy & Widmer, 2013). As work-family trajectories were strongly associated with gender, this five-type typology will be further differentiated by sex and turned into a nine-type typology: Family-focused female (19.9%), Double investment female (4.5%), Double investment male (19.6%), Conciliation female (8.6%), Conciliation male (4.7%), Preparation female (7.1%), Preparation male (11.5%), Conjugal and full-time female (12.6%), and Conjugal and full-time male (11.5%). This refined nine-type typology will facilitate regressions analyses in the last section, whereas including separately the five-type typology and sex in regressions would risk blurring the impact of gender on personal networks.

3. Results

3.1. Work-family trajectories and personal networks

The influence of work-family trajectories on personal networks was assessed using a series of logistic regressions (see Table 4). In the following paragraphs, we present the explanatory factors associated with each type of personal networks, starting with a baseline model without trajectories and then introducing the typology of work-family trajectories. The goal is to see whether the work-family trajectories bring additional information in comparison with the current family and employment situations. Therefore, we first computed a baseline model without trajectories to serve as a reference. Using a baseline model is crucial for theory development when the impact of new factors, here trajectories, is tested. In the first model, we included information on the respondents (sex, age, level of education, and citizenship), the current family situation (being single or in a relationship, and being parent or childless), and the employment situation (employee full-time, employee part-time, self-employed and other). In the second model, we dropped

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As our sample was composed of individuals born between 1970 and 1975 and aged between 36 and 41 years at the time of data collection (see Methods and measurements section), it is more accurate to indicate calendar years from 1991 to 2011 rather than age as there is a 5-year age variation between respondents. As a reminder, we used the twenty years directly preceding the interviews as we are interested in the composition of the personal networks in 2011.
the sex of the respondents as the typology of work-family trajectories already takes sex into account, but keep all the other control variables.

First of all, in the baseline model, we notice that the current employment status was not associated with any type of network, in contrast to the family situation. Being in a relationship was associated with **Orientation family** networks, being single with **Female friend** networks, and being childless with **Orientation family** and **Sibling** networks.

Regarding respondents’ characteristics, there was an impact of gender for friendship, women being more likely to develop **Female friend** networks and men **Male friend** networks. Finally, tertiary education was associated with **Occupational** networks, and being younger was associated with **Orientation family** network. When introducing the impact of work-family trajectories in the second model, the other factors remained statistically significant (the odds ratio (OR) even increased for tertiary education from 6.5 to 8.9, \( p < 0.001 \)), but being childless and being younger were no longer associated with **Orientation family** networks. We used the Akaike information criterion (AIC) (Akaike, 1974) to measure the quality of the statistical models. Comparing for each regression, the AIC of the two models indicated negligible differences.

**Double investment** trajectories were associated with personal networks centred on the family of procreation for both men and women, but the association was only significant for women. For men, it was also associated with personal networks composed of male friends.

**Family-focused** trajectories, exclusively female ones, were associated with personal networks organised around parents. The third type of trajectories including a long family stage was **Conciliation**. Male **Conciliation** trajectories were not associated with any type of networks, while female **Conciliation** trajectories were associated with **Female friend** networks. **Conjugality and full-time** trajectories favoured the development of ties outside the family of procreation; kinship ties for women, and

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**Fig. 1.** Typology of work-family trajectories shown by the proportion of respondents in a given co-residence and employment states, for each semester between 1991 and 2011 (n = 382).
were more often developed by individuals following Procreation family planatory factors associated with each type of personal networks. Following for the last twenty years a so-called double career, being trajectories and that was especially the case of women who had been oriented toward Orientation family networks, especially for women. Then, preparation networks were less common among in- contrast, Permanence and Children preparation networks were included children. Sig.: † p≤0.1 ; * p≤0.05 ; ** p≤0.01 ; *** p≤0.001.

Table 3
Mean time (M) and standard deviation (Std) in years spent in each stage.

| Co-residence statuses | Double investment M (Std) | Family-focused M (Std) | Conciliation M (Std) | Conjugalit/ full-time M (Std) | Preparation M (Std) |
|-----------------------|--------------------------|------------------------|----------------------|-----------------------------|--------------------|
| Two parents           | 3.2 (3.4)                | 2.5 (3.0)              | 2.2 (3.0)            | 1.7 (2.5)                   | 7.0 (6.2)          |
| One parent            | 0.2 (0.8)                | 0.6 (1.6)              | 0.8 (2.3)            | 2.3 (4.6)                   | 0.3 (1.0)          |
| Solo                  | 2.1 (2.6)                | 1.3 (1.9)              | 2.3 (3.5)            | 5.7 (4.5)                   | 3.0 (3.2)          |
| Partner               | 3.8 (2.9)                | 3.9 (2.7)              | 3.1 (3.2)            | 8.6 (5.3)                   | 4.2 (3.3)          |
| Partner and Children  | 9.8 (4.0)                | 11.7 (4.5)             | 10.0 (5.1)           | 1.1 (1.8)                   | 2.7 (2.9)          |
| Children              | 0.6 (2.2)                | 0.3 (1.1)              | 1.5 (3.7)            | 0.0 (0.1)                   | 0.0 (0.1)          |
| Relatives             | 0.1 (0.7)                | 0.0 (0.0)              | 0.1 (0.4)            | 0.1 (0.4)                   | 0.0 (0.2)          |
| Roommates             | 0.4 (1.3)                | 0.2 (0.8)              | 0.4 (1.3)            | 0.5 (1.3)                   | 2.1 (3.6)          |
| Other                 | 0.1 (0.4)                | 0.1 (0.4)              | 0.2 (0.9)            | 0.5 (1.7)                   | 1.2 (2.5)          |

Table 4
Impact of work-family trajectories on personal networks (logistic regressions, odds ratios).

|                      | Procreation | Orientation | Sibling | Kinship | Male friend | Female friend | Occupational | Sparse |
|----------------------|-------------|-------------|---------|---------|-------------|---------------|--------------|--------|
| (Intercept)          | 0.1         | 0.0         | 43.5    | 0.1     | 0.7         | 0.8           | 0.1          | 0.0    |
| Women                | 0.9         | 1.9†        | 1.2     | 1.2     | 0.2**       | 3.5*          | 0.6          | 0.7    |
| Age                  | 1.0         | 1.1         | 0.8*    | 0.9     | 1.0         | 1.1           | 1.1          | 1.2    |
| Swiss                | 0.8         | 0.7         | 1.4     | 1.6     | 1.0         | 1.0           | 0.6          | 0.8    |
| Family situation     |             |             |         |         |             |               |              |        |
| Being single         | 0.7         | 1.0         | 0.3*    | 0.3*    | 0.4         | 0.3†          | 1.0          | 1.4    |
| Being parent         |             |             |         |         |             |               |              |        |
| Excl,¿                | 0.5*        | 0.8         | 0.4*    | 2.0**   | 1.2         | 2.5†          | 0.5†         | 0.5    |
| Level of education   |             |             |         |         |             |               |              |        |
| (ref. vocational)    |             |             |         |         |             |               |              |        |
| Lower secondary      | 1.9         | 1.9         | 0.9     | 1.03    | 0.8         | 0.7           | 0.1†         | 0.1*   |
| Upper secondary      | 1.5         | 1.6         | 0.8     | 0.8     | 1.6         | 1.6           | 0.2          | 0.2    |
| Tertiary             | 0.6         | 0.8         | 1.6     | 1.0     | 0.4†        | 0.5           | 0.6          | 0.7    |
| Employment situation |             |             |         |         |             |               |              |        |
| (ref. employee full-time) | 0.12       | 1.0         | 0.8     | 0.5     | 2.3         | 2.3           | 2.0          | 2.4    |
| Part-time            | 1.5         | 1.3         | 0.5     | 0.3*    | 2.0         | 2.2           | 0.9          | 0.9    |
| Self-employed        | 1.0         | 1.0         | 0.9     | 0.8     | 1.2         | 0.9           | 1.2          | 1.5    |
| Work-family trajectories |             |             |         |         |             |               |              |        |
| Double investment F. | 2.3†        | 0.7         | 2.4     | 2.4     | Excl,¿      | 0.6           | 0.6          | 2.2    |
| Double investment M. | 1.8         | 0.3**       | 1.1     | 0.8     | 3.7**       | 1.5           | 1.5          | 4.4†   |
| Family-focused F.   | 1.6         | 2.1†        | 1.2     | 0.8     | 0.5         | 1.4           | 0.3          | 1.0    |
| Conciliation F.      | 0.9         | 0.8         | 1.3     | 1.1     | 0.5         | 4.5*          | 1.5          | 0.7    |
| Conciliation M.      | 2.0         | 0.3         | 2.4     | 0.5     | 0.6         | 1.8           | 3.3          |        |
| Conjugality-full-time| 0.3*        | 1.6         | 0.6     | 4.4***  | 0.4         | 1.6           | 0.3          |        |
| Conjugality-full-time M. | 0.2*   | 1.4         | 0.6     | 0.7     | 5.5***      | 0.2†          | 0.2          | 0.6    |
| Preparation F.       | 1.4         | 2.9*        | 0.8     | 0.3     | 0.7         | 0.7           | 0.5          | 1.6    |
| Preparation M.       | 0.7         | 1.6         | 0.3†    | 2.7*    | 1.6         | 0.1*          | 2.2          |        |
| AIC                  | 401.5       | 392.7       | 355.7   | 355.7   | 302.4       | 310           | 268.7        | 260.2  |

(a) Excluded because the Procreation family network systematically included children. Sig.: † p≤0.1 ; * p≤0.05 ; ** p≤0.01 ; *** p≤0.001.
(b) Excluded because cell was empty.

NB: We used a deviation contrast method to deal with the various effects of the work-family trajectories to estimate the effect of each category of a covariate in comparison with its overall effect instead of choosing a reference category.

friendship ties for men. Finally, Preparation trajectories were more oriented toward Orientation family networks, especially for women. After this first overview, we now describe in more detail the explanatory factors associated with each type of personal networks. Procreation family networks represented a quarter of the sample. They were more often developed by individuals following Double investment trajectories and that was especially the case of women who had been following for the last twenty years a so-called double career, being mothers and full-time workers, which is not common in Switzerland where female part-time prevails. It appears that this double burden related to a high investment in two life spheres was twice more likely (OR: 2.3, p≤0.1) to favour a focus on the family of procreation. In contrast, Procreation family networks were less common among individuals who durably focused on conjugal life, even for those of them who became parent toward the end of the observed trajectory.

Orientation family networks, those networks centred around the
respondents’ parents, were more developed by individuals (especially female) having followed a Preparation trajectory, meaning individuals who had left the parental home recently and spent a consequent amount of time in education between 1991 and 2011, and for women who were invested in the traditional role of care-giver and followed Family-focus trajectories. As age was not significantly associated with such network in the main model, it indicates that the postponed timing of the departure from the parental home, correlative implying a longer stay at the parental home, was the main explanatory dimension. In contrast, men following Double investment trajectories were less likely to have such a personal network. Their breadwinner role, and the correlated delegation of family intergenerational solidarity to their female partners, may explain such a move away from Orientation family networks. Having a partner was positively associated with Orientation family networks. Finally, childless individuals were equally to have such a network showing that transition to parenthood did not alter that specific bond.

Sibling networks were more common among individuals who did not experience the transition to parenthood; childless individuals were five times more likely to have such networks (OR for being parent: 0.2, p ≤ 0.01), suggesting that the process of family formation, at least temporarily, decreased the importance of siblings. In the case of sibling relationships, having or not children seems more important than the duration of the family life stage. In contrast, Kinship networks were more often developed by women following Conjugality / full-time trajectories (OR: 4.4, p ≤ 0.001) and, to a lesser extent, by men following Preparation trajectories (OR: 2.7, p ≤ 0.05). Having children increased the chance of developing Kinship networks.

Male friend networks were developed by men fully invested in the work sphere, independently from their family life stage as it was the case for men in Conjugality / full-time trajectories with a OR of 5.5 (p ≤ 0.001), and even more for men in Double investment trajectories with a OR of 3.7 (p ≤ 0.01). Interestingly, it did not work the other way around for Female friend networks. Indeed women following Conjugality / full-time and Family-focused trajectories did not develop more often these trajectories. Female friend networks were 4.5 times (p ≤ 0.05) more developed by women following Conciliation trajectories. The odds of having such a network was twelve times (p ≤ 0.001) higher for single individuals in comparison with those being in a couple relationship. The absence of a partner may indicate a reversibility dimension with the experience of an intimate relationship breakdown, or even lone motherhood. A gender divide characterises the data, as male respondents more often developed Male friend networks, and female respondents more often developed Female friend networks, but strict traditional roles tend to favour male friendship whereas female friendship appears as especially important after de-partnering.

Occupational networks were more often developed by individuals following Double investment trajectories, with a OR of 5.2 for women (p ≤ 0.1) and 4.4 for men (p ≤ 0.1). Interestingly they were not associated with individuals focused on conjugal life who may have more time for extensive sociability. However, those individuals did invest more in networks developed around kinship for women and friendship for men. Occupational networks were strongly associated with a tertiary level of education. In contrast, Sparse networks, corresponding to respondents who did not mention any significant alter, were more likely to be found among individuals with lower levels of education.

4. Discussion

Family trajectories constitute a powerful generative mechanism of personal networks through partnership formation and parenthood, and the normative linked lives that they entail (Elder, Kirkpatrick Johnson, & Crosnoe, 2003). The family developmental model, with its normative ordering and sequencing of family stages and transitions (Aldous, 1990; Duvall, 1957; Widmer & Gauthier, 2013) was revealed by this study as a leading principle of personal network development in late modernity. Types of life trajectories which grant a large time span to nuclear family arrangements (Double Investment and Family-focused trajectories) were more likely than others to give raise to personal networks organised around the nuclear family, either from origin (Orientation family networks) or constituted by the individual (Procreation family networks). It is striking that such standardized model of trajectories, in a time of high family diversity and great cultural emphasis on autonomy in choices and actions (Beck & Beck-Gernsheim, 1995; Giddens, 1992), remain conducive of a rather close type of personal networks, associated with bonding social capital and social closure (Coleman, 1988; Widmer, 2010). Interestingly, a restricted focus on the nuclear family only occurs for double investment trajectories of women, meaning that the family developmental model is a strong factor of gender inequalities in personal networks, related with doing gender in family (Giudici & Widmer, 2015).

Personal networks are the result of past life sequences and enable further sequences to come by providing specific structural opportunities and limits framing individual actions and decisions. Research such as this one suggests that the most intimate ties that an individual has remain, to a large extent, dependent on the unfolding of events and transitions over a long time-span. Although individuals show agency in their life choices (Martuccelli, 2006; Smart, 2010), a very large majority of them nevertheless follow standard life paths that are conducive of normalized personal networks. In that respect, an approach encompassing life trajectories as systemic wholes (Aisenbrey & Fasang, 2010) makes it possible to more clearly capture the constraints that life (especially family) trajectories represent for sociability, in line with the path dependency principle (Abbott, 2016; Dannefer, 2003).

In contrast, alternative trajectories moving away from the family developmental model led to relationships beyond the nuclear family, especially for trajectories characterised by the absence of a stage with children or a focus on conjugal life. Such personal networks provide some compensatory relational opportunities, either on the side of extended family ties (siblings, kin, etc.), or on the side of friends or colleagues. They depend on the extent to which alternative resources are present and can be invested in the development and maintenance of personal relationships, among which education, as a proxy for social class, appears to be a major one (McPherson et al., 2006). Indeed, one needs to have sufficient cultural and economic capitals to develop and maintain ties outside the normative model constituted by family. For instance, the dimension of reversibility, a feature of contemporary alternative trajectories (Brückner & Mayer, 2005; Kapella et al., 2010), matters for the development of personal networks, as de-partnering favours the fostering of female friendships.

Comparatively the importance of the work dimension of life trajectories remains modest. Indeed, individuals whose trajectories have focused on full-time paid work for decades gave more space to colleagues in their personal networks than those for whom paid work was a secondary occupation. Interestingly, the double investment in family and career is conducive of networks open to friendship and occupational networks only for men and not for women, a result which exemplifies a normatively gendered work-family conciliation (Giudici & Widmer, 2015). This gendering of personal networks under the influence of work trajectories was also shown for friendship choices. In comparison with the importance of family formation, work trajectories are however a secondary factor in the development of personal networks.

The present contribution has some limitations that should be noted. The personal networks at hand were collected using a unique name generator based on the subjective importance of the alters of a single informant and, therefore, we elicited the network core (strong ties). Other complementary generators, such as sociability context generators, could be used to deepen the understanding of personal networks. We also focused on the composition of personal networks and, while it is a key dimension, further studies should systematically link it to other network outcomes and especially to resources stemming from...
personal networks. In our sample, the majority of respondents had siblings, but it would be interesting to look in greater detail at the impact of being an only child on the development of personal networks, and, more globally, to control for the presence of other potential ties with a larger sample.

Despite these limitations, this research went beyond the effects of single life transitions and events, and consider the overall cumulative logic of life development. In this regard, the focus on life trajectories proved to be a key advantage, both theoretically for its systemic perspective of the life course and methodologically for its potential of grasping the dimensions of timing, ordering, reversibility, and duration (Abbott, 2016; Modell et al., 1976). Durations in specific family stages proved to be a key explanatory dimension of personal networks associated with the life course. One likely mechanism associated with the proximity principle (Festinger et al., 1950; Newcomb, 1960) is that such durations relate with joint residence, time spent together and frequent interactions with specific individuals, which then remain significant over the long run (Antonacci & Akiyama, 1995; Wellman, 1999; Widmer, 2010). Further research on the consequences of family trajectories for personal networks in a variety of national contexts seems to be necessary.

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Appendix A

Table A1

Summary of the sample’s characteristics (n = 382).

| Birth cohorts        | 1970-1975 (median 1972) |
|----------------------|-------------------------|
| Age range (years)    | 36–41 (median 39, mean 38.6) |
| Female respondents   | 53.00% |
| Swiss citizens       | 74.00% |
| Education level      | - Lower secondary -8% |
| - Upper secondary -7% |
| - Vocational -63%    |
| - Tertiary -22%      |
| Demographic reservoir| - Having parents (alive) -96% |
| - Having siblings (alive) -91% |
| - Having a partner -88% |
| - Having children -75% |

References

Abbott, A. (2001). Time matters: On theory and method. Chicago: The University of Chicago Press.

Abbott, A. (2016). Processual sociology. University of Chicago Press.

Aeby, G., Widmer, E. D., & Carlo, I. D. (2014). Bonding and bridging social capital in step- and first-time families and the issue of family boundaries. Interpersona an International Journal on Personal Relationships, 8(1), 51–69.

Aisenbrey, S., & Fasang, A. E. (2010). New life for old ideas: The” second wave” of sequence analysis bringing the” course” back into the life course. Sociological Methods & Research, 38(3), 420–462.

Akaike, H. (1974). A new look at the statistical model identification. IEEE Transactions on Automatic Control, 19(6), 716–723.

Aldous, J. (1990). Family development and the life course: Two perspectives on family change. Journal of Marriage and the Family, 54, S15–S78.

Antonacci, T. C., & Akiyama, H. (1995). Convoys of social relations: Family and friend-ships within a life span context. In R. Blieszner, & V. H. Bedford (Eds.). Handbook of aging and the family (pp. 355–371). Westport, CT: Greenwood Press.

Arts, W. I. L., & Gelissen, J. (2002). Three worlds of welfare capitalism or more? A state-of-the-art report. Journal of European Social Policy, 12(2), 137–158.

Beck, U., & Beck-Gernsheim, E. (1995). The normal chaos of love. Cambridge: Wiley-Blackwell.

Bidart, C., & Lavenu, D. (2005). Evolutions of personal networks and life events. Social Networks, 27(4), 359–376.

Billari, F. (2004). Becoming an adult in Europe: A macro/[micro]-demographic perspective. Demographic Research, 53, 15–44.

Borgen, F. H., & Barnett, D. C. (1987). Applying cluster analysis in counseling psychology research. Journal of Counseling Psychology, 34(4), 456–468.

Bruckner, H., & Mayer, K. U. (2005). De-standardization of the life course: What it might mean? And if it means anything, whether it actually took place? Advances in Life Course Research, 9, 27–53.

Bryant, C. M., & Conger, R. D. (1999). Marital success and domains of social support in long-term relationships: Does the influence of network members ever end? Journal of Marriage and the Family, 61(2), 437–450.

Coleman, J. S. (1988). Social capital in the creation of human capital. The American Journal of Sociology, 94, S95-S120.

Dannefer, D. (2003). Cumulative advantage/disadvantage and the life course: Cross-fertilizing aging and social science theory. The Journals of Gerontology Series B, Psychological Sciences and Social Sciences, 58(6), S327–S327.

Degene, A., & Lebeaux, M.-O. (2005). The dynamics of personal networks at the time of entry into adult life. Social Networks, 27(4), 337–358.

De Singly, F. (1996). Le soi, le couple et la famille. Paris: Nathan.

Duvall, E. (1957). Family development. Philadelphia: Lippincott.

Eagle, D. E., & Proeschold-Bell, R. J. (2015). Methodological considerations in the use of name generators and interpreters. Social Networks, 40, 75–83.

Elder, G. H., Kirkpatrick Johnson, M., & Crosse, R. (2003). The emergence and development of life course theory. In J. T. Mortimer, & M. J. Shanahan (Eds.). Handbook of the life course (pp. 3–19). New York: Kluwer Academic / Plenum Publishers.

Evers-Henderson, G. (2009). Incomplete revolution: Adjusting welfare states in women’s new roles. Cambridge: Polity Press.

Esser, H. (1996). What is wrong with “variable sociology”? European Sociological Review, 12(2), 159–166.

Everett, B. S., Landau, S., Leese, M., & Stahl, D. (2011). Cluster analysis (5th edition). Chichester: John Wiley & Sons, Ltd.

Festinger, L., Schachter, S., & Black, K. W. (1950). Social pressures in informal groups: A study of human factors in housing. New York: Harper.

Fingerman, K. L., Hay, E. L., & Birditt, K. S. (2004). The best of ties, the worst of ties: Close, problematic, and ambivalent social relationships. Journal of Marriage and the Family, 66(3), 792–808.

Gabadinho, A., Ritschard, G., Müller, N. S., & Studer, M. (2011). Analyzing and visualizing state sequences in R with TraMineR. Journal of Statistical Software, 40(4), 1–37.

Gauthier, J.-A., Widmer, E. D., Bucher, P., & Notredame, C. (2010). Multichannel sequence analysis applied to social science data. Sociological Methodology, 40(1), 1–38.

Georgie, L. (1993). Sociological perspectives on life transitions. Annual Review of Sociology, 19(1), 353–373.

Giddens, A. (1992). The transformation of intimacy: Sexuality, love and eroticism in modern societies. Cambridge: Polity Press.
