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An apple doesn't fall far from the tree—Or does it? Occupational inheritance and teachers' career patterns

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ABSTRACT

Based on 15 years of employment and job mobility data from a sample of Swiss primary school teachers ($N = 999$ in three cohorts), we use optimal matching analysis (OMA) to identify six career patterns between the mid-1960s and the late 1990s. Thereby, we provide a rare historical perspective on career patterns in the last four decades of the 20th century. Results indicate that career patterns have not consistently become less stable between cohorts despite changes in socially constructed career boundaries, such as increasing occupational opportunities for women. Further, we examine whether or not occupational inheritance (i.e., the increased probability for children to follow their parents' profession) affects individual career patterns beyond the first vocational choice. We find that teacher graduates whose mothers also worked as teachers follow a stable teacher career pattern less frequently than graduates whose parents were not teachers. The article concludes with theoretical and methodological directions for future research on career patterns.

1. Introduction

Career patterns are widely considered as being conceptually relevant in career research (Vinkenburg & Weber, 2012) and practically useful, for example in counseling (Jepsen & Choudhuri, 2001; Super, 1954). Career patterns are defined here as "clusters of similar sequences of individuals' work experiences over time", thus combining a frequently used definition of "career" (Arthur, Hall, & Lawrence, 1989, p. 8) and a recent conceptualization of career patterns (Dlouhy, Vinkenburg & Biemann, forthcoming, p. 2). This definition explicitly acknowledges the often-neglected sequential nature of careers, thereby comprising—but clearly extending—earlier definitions of career patters (e.g., Super, 1954). Although career patterns have been referred to ubiquitously in the careers literature, corresponding empirical evidence is still rather limited (Dlouhy et al., forthcoming; Vinkenburg & Weber, 2012). For example, the extent to which career patterns are stable over time is still open to debate (Biemann, Fasang, & Grunow, 2011). Further, knowledge on potential influencing factors of career patterns (other than age and gender) is scarce (Dlouhy et al., forthcoming), as are studies investigating career patterns inside/across occupations or the work-non-work domain rather than focusing on individuals' hierarchical progression over time (Vinkenburg & Weber, 2012).

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Our study addresses these aspects. First, regarding stability, we investigate whether the percentage of individuals pursuing a stable occupational career pattern (i.e., a pattern "experienced by persons engaged in the same type of occupation over their entire working career", Jepsen & Choudhuri, 2001, p. 1) changes between different cohorts. Second, regarding hitherto unknown influencing factors of career patterns, we investigate whether and how individuals' career patterns across occupational and work-non-work boundaries are affected by "occupational inheritance". Occupational inheritance occurs when individuals choose their parents' occupation (i.e., "a set of jobs whose main tasks and duties are characterized by a high degree of similarity", ILO, 2004). This term was coined to describe the consistent finding that individuals have a greater-than-chance tendency to choose occupations that are very similar to those of their parents (Aldrich & Kim, 2015). There is a well-established positive relationship between parents'—particularly fathers'—profession and children's vocational career choice (e.g., Jodl, Michael, Malanchuk, Eccles, & Sameroff, 2001; Werts, 1968). However, although factors that affect the development of children's vocational interests and adolescents' initial vocational choices have been widely examined across cultures and in various disciplines, such as sociology, economics and developmental psychology, it remains unknown whether and how parents' professions and career patterns have an effect on their children's career patterns *beyond* the initial vocational choice. Therefore, we investigate whether parents' career patterns affect chances that children will choose their parents' profession as their initial vocational choice, and whether parents working in the same profession affect an individual's subsequent career pattern beyond his/her first vocational choice.

This study builds on a sample of primary school teachers in Switzerland. Teachers are well-suited to analyze occupational inheritance, because teaching may be regarded as a stable profession in several ways. First, it has existed for decades and the core business of a primary school teacher (i.e., educating young children) has largely remained the same. This makes it possible to compare teachers meaningfully across different cohorts. Second, schools are relatively stable organizations as they are not frequently opened and closed, compared to organizations in the private sector. This gives teachers the opportunity to enact their careers in a comparatively stable environment. Third, primary school teachers have few opportunities for hierarchical advancement (e.g., Herzog, Herzog, Brunner, & Müller, 2007) unless they complete some further studies and move out of the profession.

Our study contributes to the advancement of the careers and occupational inheritance literature by providing novel insights regarding the effects of parents' profession and parental career patterns on their children's careers beyond the first vocational choice. Further, it helps to gain a more thorough understanding of the nature and the time-related changes of career patterns as well as their boundaries, that is, structural elements of individual careers. More generally, our results also provide new insights into the "structure vs. agency" debate (see, for example, Inkson, Dries, & Arnold, 2014; Weick, 1996). This debate focuses on whether individual careers are more strongly determined by external structure (e.g., socio-demographic background, gender, and institutional regulations) or by individual agency, such as individuals' capability to overcome external constraints and shape their own career path.

2. Theory and hypotheses

More than six decades ago, Super (1954) was one of the first researchers to refer to career patterns, highlighting their relevance particularly for career counseling. To date, the term "career pattern" has been ubiquitously used in the literature (Vinkenburg & Weber, 2012). Despite the lack of a commonly accepted definition (Dlouhy et al., forthcoming), all potential definitions acknowledge that career patterns consist of work-related sequences in individuals' career trajectories (e.g., Dlouhy et al., forthcoming; Jepsen & Choudhuri, 2001; Super, 1954; Zytowski, 1969).

Dlouhy et al. (forthcoming) provide a helpful overview of studies that examined potential influencing factors of career patterns, such as age, gender, personality variables, occupational and environmental aspects. In line with Vinkenburg and Weber (2012) they highlight that there is still a lack of empirical studies on the potential stability of career patterns over time as well as research on factors (other than age and gender) that affect patterns across occupational and work-non-work boundaries. Lastly, in support of Biemann and Datta (2014), they point out that recent statistical developments ("sequence analysis") have enabled researchers to examine the sequential nature career patterns more accurately.

In the teaching context, research on career patterns has been almost lacking, with the exception of a few interview-based studies (e.g., Becker, 1952; Huberman, 1989). To our knowledge, only one study (Lindqvist, Nordänger, & Carlsson, 2014) has investigated sequences of teachers' careers quantitatively to date. Based on the career trajectories of 87 Swedish teachers over 19 years, Lindqvist and colleagues showed that, in line with various other reports (e.g., Federal Statistical Office, 2014), teacher attrition is particularly high in the first five years. However, the authors also found that several individuals left teaching only temporarily; they returned after a few years of childcare or working in a different profession. Thereby, Lindqvist and colleagues provided novel insights into teachers' often non-linear careers trajectories. Nevertheless, the small sample size and the fact that data had not been gathered systematically after the first five years did not allow for a thorough investigation of career patterns. In brief, large-scale career pattern studies using sequence analysis are still lacking in the teaching context.

The first hypothesis examines whether the percentage of individuals pursuing a stable career pattern changes between different cohorts. As various authors (e.g., Inkson, Gunz, Ganesh, & Roper, 2012; Rodrigues & Guest, 2010) have argued, it is paramount to conduct more quantitative studies based on objective career data in order to examine claims that individual careers have generally become less stable.

The few existing studies with such analyses provide a multifaceted picture. For example, Rodrigues and Guest (2010) showed that the average job tenure in various Western countries has not changed much over the past two decades, although for some groups of employees—especially for disadvantaged and young workers—a decline in job stability was reported. Further, several studies (e.g., Biemann, Zacher, & Feldman, 2012; Kattenbach et al., 2014; Kovalenko & Mortelmans, 2014) found behavioral

differences between cohorts, such as an increase in the number of career transitions for younger cohorts. Yet, cohort differences in mobility behavior may be limited to early career stages (Lyons, Schweitzer, Ng, & Kuron, 2012). These studies indicate that there have, indeed, occurred some objectively observable changes towards more mobile individual careers, although the effects are often complex. For example, although male and female life courses gradually seem to become more similar, evidence of growing between-person diversity has been found across cohorts (McMunn et al., 2015). Thus, even though the extent of such changes may not have been as drastic and as widespread as often claimed in the literature, it seems plausible that career boundaries may have weakened between cohorts, resulting in career patterns that are less stable (e.g., with more occupational change) and slightly more complex for more recent cohorts (e.g., Biemann et al., 2011). Although corresponding literature in the specific context of teachers' careers is lacking, it seems plausible to assume that these broader societal trends are applicable to teachers as well. We thus hypothesize:

H1. The percentage of individuals with a stable career pattern is lower in recent cohorts than in earlier cohorts.

Career context greatly matters (e.g., Young, Valach, & Collin, 2002). Parents are one such contextual factor that may well affect career patterns (Dlouhy et al., forthcoming; Super, 1954) because they have a strong influence on their children's educational and vocational choices, in addition to other influencing factors, such as teachers (Kniveton, 2004) and differences in educational systems (Dustmann, 2004).

Numerous studies have identified a variety of non-genetic parental influences on children's vocational choices and development (for an overview, see Hartung, Porfeli, & Vondracek, 2005). For example, parents may provide vocational guidance and career support for their children, and their support affects vocational decision making processes of adolescents positively unless it is perceived as interference (e.g., Dietrich, Kracke, & Nurmi, 2011). Also, a close and harmonious relationship with their parents may serve "to buffer young women from pressure toward foreclosing on career choices" (Blustein, Walbridge, Friedlander, & Palladino, 1991, pp. 47–48). Further, children's vocational choices can be affected by occupational inheritance. For example, it has been argued that occupational inheritance helps to explain inequalities of income, wealth, or power (Rytina, 1992), and that it can help to understand work-related values and attitudes (Aldrich & Kim, 2015). Such studies clearly indicate that occupational inheritance is assumed to have long-term effects on individuals' career patterns. To date, however, it is still unknown if and how career patterns may be affected by occupational inheritance. It is therefore important to review some key reasons for occupational inheritance.

First, children's vocational preferences are affected by various psychological and sociological processes. A consistent finding is that parents' socio-economic and educational background affects their children's educational development (Ferreira, Santos, Fonseca, & Haase, 2007) as well as educational and occupational aspirations (Jodl et al., 2001). For example, Kirkpatrick Johnson and Mortimer (2002, pp. 51–52) argued that the characteristics of parents' jobs are related to parents' personalities and work-related values, which, in turn, affect their parenting behavior and, ultimately, "children's and adolescents' developing interests, values, and aspirations".

Particularly fathers' occupation has been identified as an influential factor for educational attainment (Egerton, 1997), the development of work values (Mortimer, 1974), and subsequent vocational choices (e.g., Werts, 1968). Adolescents seem more likely to develop such vocational values based on their same-sex parent rather than the opposite-sex parent (Kirkpatrick Johnson & Mortimer, 2002). For example, Werts (1968) found that sons of teachers tended to choose a college degree in teaching more frequently than sons of fathers with other occupations. In contrast, mothers' occupation as an influencing factor has received much less attention than the widely studied father-son relationship. Nevertheless, some empirical studies (e.g., Trice, Hughes, Odom, Woods, & McClellan, 1995) confirmed that girls' career aspirations may be greatly affected by their mothers' occupation. This is notable, as earlier studies (e.g., Goodale & Hall, 1976) argued that girls may be less likely than boys to adopt their parents' work values and pursue corresponding career paths. Nowadays, with women's increasing participation in the workforce and corresponding changes in life course patterns (McMunn et al., 2015), calls for investigating mothers' occupations and their influence on children (e.g., Trice et al., 1995) may have become even more relevant.

As a second major influencing factor for occupational inheritance, Laband and Lentz (1983) showed that it may be economically sensible for children to follow their parents' profession rather than to pursue a new career trajectory. These authors claimed that by choosing their parents' occupation, individuals can benefit from their parents' human capital, acquired "as a byproduct of growing up in close proximity to one's parent's job/workplace" (Lentz & Laband, 1989, p. 397). For example, a child following his/her parents' profession benefits from various types of knowledge transfer that may serve as a motivator or help to finish a degree successfully. Economic aspects may be particularly salient for children of self-employed parents (Aldrich & Kim, 2015) as they receive two additional capital transfers: brand name loyalty (i.e., consumers' loyalty to the family business) and the physical assets of their parents' firm (e.g., stock, machinery or farm land), all of which can influence rational occupational choices (Lentz & Laband, 1990). In brief, children who follow their parents' profession arguably have a comparative advantage in accruing various relevant types of capital, which is likely to benefit their careers.

In summary, based on these studies, children who know their parents' profession well are more likely to develop corresponding work values and, thus, to select their parents' profession later on. Also, they inherit various types of career capital from their parents. Therefore, one may theorize that children who adopt their parents' occupation will be more likely to pursue a long-term career in that occupation than children who do not follow their parents' career path.

However, there are various indicators that exactly the opposite effect might occur. First, the younger a person when educational and vocational decisions need to be made, the less information is available about academic potential and occupational interests. This leads to uncertainty, which, in turn, favors "conservative decisions" (Schnabel, Alfeld, Eccles, Köller, & Baumert, 2002, p. 194) and eventually increases chances that children follow their parents' career path, for example, because alternatives are not properly evaluated. Second, children tend to have a much better understanding of their parents' occupation than of other vocational options, which may also result in

negative outcomes. Mortimer (1974, p. 1295) cautioned that "occupational inheritance might […] reflect a lack of initiative on the part of the son, since it is simpler to carry on the family work tradition than to embark on a new and unknown career path". Third, children who follow their parents' professional path may strongly identify with that particular profession not least because of their feelings for their parents (Whitbeck, 2000). This may be experienced as a "calling", that is, "the work a person perceives as his purpose in life" (Hall & Chandler, 2005, p. 160). However, as shown in a study of preservice teachers, feelings of "being called" can also lead to an "elevated sense of self" and the adoption of a simplistic view of one's professional future (Whitbeck, 2000, p. 135). This may prevent individuals from studying seriously, which can result in increased frustration when confronted with the professional reality after graduation (Whitbeck, 2000). In brief, therefore, children who follow their parents' occupation either to reduce uncertainty, due to a neglect of potential alternatives or simply because it is more convenient, may be less well prepared for the world of work and less likely to find a job that matches their own values, which may result in greater-than-chance turnover out of the parental profession later in their careers.

To sum up, it has been widely acknowledged for decades that parents' profession may affect their children's vocational choice and, arguably, also their subsequent career paths. However, due the absence of empirical evidence, it is still unknown, *if and how* children's career patterns are influenced beyond the first vocational choice. Yet, we argue that the above-mentioned opposing points of view can be reconciled when taking into account different individual career stages.

According to the existing literature, individuals' *initial vocational choice* (i.e., a choice reflecting a young individual's *expected* fit between his/her vocational interests and an occupation) seems to be clearly affected by various structural forces, as shown above. Building on Kirkpatrick Johnson and Mortimer's (2002) argument that parents' jobs shape their parental values, one may further assume that parents' pursuing different career patterns (i.e., following different sequences of jobs and positions over time) will develop different work values, too. For example, parents with stable career patterns may arguably develop stronger ties with their occupation than parents with non-stable career patterns who, in contrast, may only have weak occupational ties, thus signaling lack of fit. Eventually, such differences in parental career patterns may well affect their children's development of work-related interests, leading to differences in occupational inheritance, either reducing or increasing the likelihood that children will aim for their parents' initial vocational choice.

H2. Having a mother or father with a stable career pattern increases chances that children will choose their parents' profession as their initial vocational choice (compared with children of mothers or fathers with a non-stable pattern).

Many of the above-mentioned influencing factors towards more occupational inheritance may well remain relevant beyond the first vocational choice. However, *after* entering the workforce, various additional factors emerge, potentially affecting children's career decisions with the exactly opposite effect. For example, individuals gradually develop their own career orientations and, as a result thereof, they become more agentic in their career-related decisions (Schein, 1978). According to the literature, individuals who choose their parents' profession may be at greater risk of doing so either for the sake of simplicity (Blustein et al., 1991; Mortimer, 1974) or due to positive feelings for their parents (Whitbeck, 2000). As a result, individuals' subsequent *experienced* fit between their own values and their occupation may be lower, and they may therefore be likely to show higher turnover intentions (Verquer, Beehr, & Wagner, 2003) and higher actual turnover (Hoffman & Woehr, 2006) after entering the workforce.

H3a. Having a mother (H3a) working in the same profession reduces an individual's likelihood of pursuing a stable career pattern.

H3b. Having a father (H3b) working in the same profession reduces an individual's likelihood of pursuing a stable career pattern.

3. Sample, measures, and method

3.1. Sample

Our dataset was originally gathered in 2002 for a large study of Swiss primary school teachers in which four alumni cohorts (1964, 1974, 1984, 1994) from all teacher colleges of the Canton of Bern in Switzerland were contacted with an extensive paper-based questionnaire (for details, see W. Herzog et al., 2007). The dataset is unique because it consists of individuals of one single profession (all of them graduated as teachers) originating from one single region in Switzerland. The two publications based on that study (S. Herzog, 2007; W. Herzog et al., 2007) focused on teachers' career-related decision processes and coping strategies (e.g., their dealing with stress and strain), but not on their career patterns. In contrast, despite building on the same dataset, our study investigated the career patterns of three of these cohorts of primary school teachers over 15 years. Overall, 3251 individuals were approached to participate in the study. We included individuals from three cohorts (1964, 1974, and 1984) and excluded those with <15 years of experience after graduation or with missing data. The final sample consisted of 999 individuals with an overall response rate of 31.9% (cohort 1964: 287 individuals, response rate 39.6%; cohort 1974: 438 individuals, response rate 33.5%; cohort 1984: 274 individuals, response rate 22.4%). 68.4% of them were female, which reflects the gender ratio for Swiss primary school teachers (Wolter, Denzler, & Weber, 2003).

3.2. Measures

The dataset offered detailed information on graduates' careers, including career choices of their parents and their children. For our analyses, we used the following variables.

3.2.1. Career sequence

Starting point for individuals' career trajectories was detailed information on each individual's jobs in a CV-style format (i.e., start time, end time, description, geographical location, work quota in percent for each job or task). We used information from the 15 years after graduation to generate individuals' career sequences, based on seven generic career states: (1) work as a primary school teacher; (2) work at a public school but not as a primary school teacher; (3) work in higher education or the educational system; (4) work in other profession than teaching or educational system (5) further study activities; (6) parental leave and childcare; (7) not employed for various reasons.

The survey instrument allowed coding more than one career state simultaneously, for example, primary school teacher and childcare (50% each). To retain this important information, we generated two-digit codes whenever an individual simultaneously held more than one state. For example, the codes 1_6 and 6_1 indicated part-time work as a primary school teacher (generic code 1) and part-time childcare (6). This yielded 56 different states (seven generic states plus $7 \times 7 = 49$ two-digit codes). We used these states to code six-month intervals for 15 years after graduation, yielding a sequence of 30 career states for each of the 999 individuals in the sample. Among the $999 \times 30 = 29{,}970$ coded periods, the most frequent state was "Work as a primary school teacher" (12,553 periods), followed by "Parental leave and childcare" (2823 periods). The most frequent two-digit code was a combination of these two states (i.e., 1_6 and 6_1), indicating part-time teaching and childcare (1192 periods). No information was available for 46 periods (i.e., missing data about 0.15% for the career states).

These career sequences formed the basis for subsequent analyses. We did thus not directly code career stability or other aggregated variables for individuals' careers. Instead, the core characteristics of each pattern allowed us to describe generically key features of individual career trajectories in each pattern. For example, a pattern that comprises individuals with continuous employment as primary school teachers indicates high career stability; a pattern with numerous moves to other professions would be an example of careers with lower stability.

3.2.2. Cohort

This variable captured the individual's graduation cohort. We used this information to test variations in career patterns over time.

3.2.3. Relatives' initial vocational choices

The survey instrument assessed whether mother, father, siblings, the partner, and own children of the individuals in the sample also chose a teaching career. We generated a dummy variable for each category with 1 (=career in teaching) and 0 (=no career in teaching). For siblings and children, data were only available at an aggregated level (e.g., 1 = one *or more* children chose a career in teaching).

Lastly, we used *age at graduation*, *gender*, *number of children*, and the *partner's employment status* as control variables, because previous research has shown their relevance for career trajectories (Biemann et al., 2012).

3.3. Data analysis strategy

Following Vinkenburg and Weber's (2012) advice, we employed optimal matching analysis (OMA) to derive individuals' career patterns from the sequence data (for an overview on OMA, see Aisenbrey & Fasang, 2010; Biemann & Datta, 2014). The method computes similarities of sequences by assigning costs to operations (insertion, deletion, or substitution of a sequence element) to align pairs of sequences. As a simple example, think of sequence 1 with the states "B B D A A A" and sequence 2 with "B B B D A A." To align sequence 2 with sequence 1, one might substitute the third B by a D and substitute the D by an A (i.e., two substitutions) or a B could be deleted and an A inserted (i.e., one insertion and one deletion operation). Sequences with a high similarity (i.e., low number of operations for alignment) form a cluster that can be interpreted as a career pattern. Previous studies used this method to analyze, for example, career patterns of musicians (Abbott & Hrycak, 1990), top managers (Biemann & Wolf, 2009), and female executives (Blair-Loy, 1999).

OMA requires a specification of cost settings for substitution and indel (*in*sert and *del*etion) operations that are allowed to match the sequences (for details on cost settings, see Gauthier, Widmer, Bucher, & Notredame, 2009; Lesnard, 2010). First, we derived substitution costs from a cost matrix of the seven generic states based on theoretical considerations of career state similarities. For example, we set substitution costs to 1.0 for states (1) *Work as a primary school teacher* and (2) *Work as a teacher in other school types*, because both are teaching positions. We chose costs of 2.0 for a substitution of (1) and (4) *Work in other professions*, because these two states are on average less similar. As noted above, we allowed two states simultaneously, for example if an individual worked part-time as a teacher, but also had childcare duties. Costs were then computed as an average from a comparison of the states involved. For example, substitution costs for (1) and (1_6) *Work as primary school teacher & Parental leave* amounted to 0.75, because costs for replacing (1) and (1) were 0, and costs for replacing (1) and (6) were 1.5. This approach allowed us to compute the final substitution cost matrix with 56 different states and substitution costs ranging from 0.0 to 2.0 ($M = 1.21$). Indel costs were set to 1; therefore, costs for a substitution (with a maximum of 2) were always lower than costs for deleting an element and inserting another element (i.e., two indel operations: $1 + 1$) (Biemann & Datta, 2014). We employed these costs settings in the alignment process of OMA to derive the 999×999 distance matrix that contained the total incurred costs for all pairs of sequences. This distance matrix was then used as the input for a cluster analysis using Ward's minimum variance method (Dlouhy & Biemann, 2015). The resulting clusters comprised individuals with similar career sequences (i.e., low transformation costs) and can thus be interpreted as career patterns (for details on cluster analysis and

validation in OMA, see Dlouhy & Biemann, 2015; Hollister, 2009). For hypothesis testing, we used results from OMA in logistic regression analyses. All analyses were performed using R (R Development Core Team, 2015) with the TraMineR package for OMA (Gabadinho, Ritschard, Müller, & Studer, 2011) (code available on request).

4. Results

This section is divided into two parts. First, we present descriptive results from optimal matching analysis, which offers a better understanding of underlying career patterns in our sample of primary school teacher graduates. We used data from 999 individuals who provided sufficient information on their career sequences. In a second step, we present our hypotheses tests, using listwise deletion because the dataset contains missing data for some study variables. This approach results in 827 individuals for the second step.

4.1. Pattern description

Table 1 shows descriptive results from the optimal matching analysis. We chose a solution with six clusters for reasons of manageability and parsimony (Abbott & Hrycak, 1990). These patterns are based on the career sequences described above.

Fig. 1 shows the aggregate tempograms (Lesnard, 2010) for all six patterns, depicting the distribution of professional activities in the career trajectories of all 999 participants over 15 years. The x-axis represents the relative time (i.e., 30 periods of six months), starting at graduation for each individual. For each period, the percentage of individuals working in a particular activity is indicated on the y-axis.

4.1.1. Pattern 1: stable primary school

The first pattern contains 205 individuals who worked on average 27.68 out of 30 six-month periods of their career as primary school teacher. It thus comprises individuals with a stable career in the profession in which they received vocational training. The figure indicates that the share of individuals in primary school teacher positions is high across the whole study period. All other occupations that we used to classify individuals' career state in each six-month period occurred only infrequently. About 50% of the individuals in this cluster are female, which is substantially lower than the sample average of 68.4% women (see Table 1). The percentages of individuals' mothers and fathers with a career in teaching are 9% and 13%, respectively.

Table 1
Descriptive statistics of career patterns.

Pattern	1 Stable primary school	2 Care-taking	3 Change of profession	4 Further education	5 Change of school type	6 Later reorientation	Mean
Pattern size ($N = 999$)	205	352	87	87	81	187	
Occupation (in six-month periods)							
Primary school teacher	27.68	10.24	5.03	4.49	5.52	11.79	12.77
School (not primary school teacher)	0.07	0.95	0.40	2.40	17.38	2.28	2.43
Higher education and educational system	0.02	0.07	0.97	5.30	0.17	1.22	0.81
All other professions	0.19	0.74	14.13	2.37	0.47	0.48	1.86
Further education/studies	0.22	0.59	2.36	6.86	3.10	1.87	1.66
Parental leave/family	0.21	8.58	0.23	0.18	0.15	0.29	3.17
Others/not classifiable	0.45	0.60	3.08	4.48	0.72	1.59	1.32
Primary school/school & family	0.22	5.30	0.10	0.14	0.19	0.35	2.01
Other profession & family	0.03	1.68	0.93	0.34	0.00	0.09	0.72
Primary school teacher & school	0.16	0.20	0.08	0.11	0.09	1.93	0.49
Primary school/school & other profession	0.21	0.45	1.03	1.30	0.57	4.16	1.23
Primary school/school & further education/studies	0.51	0.59	1.52	1.83	1.63	2.88	1.28
Cohort (in %)							
Cohort 1: 1964 ($n = 287$)	20	31	6	10	14	19	
Cohort 2: 1974 ($n = 438$)	24	37	6	7	6	20	
Cohort 3: 1984 ($n = 274$)	15	37	16	9	5	17	
Demographics							
Gender (% female)	50	98	54	46	49	58	68.4
Number of children	1.68	2.44	1.46	1.44	1.56	1.63	1.89
Age at graduation	20.8	20.7	21.2	20.8	20.9	20.9	20.8
Mother teacher (in %)	9	16	27	21	23	19	17.0
Father teacher (in %)	13	17	17	23	29	18	17.8
Partner teacher (in %)	41	39	42	49	49	41	41.5
One or more siblings teacher (in %)	34	39	47	52	46	45	41.4
One or more children teacher (in %)	14	24	1	18	24	15	17.3

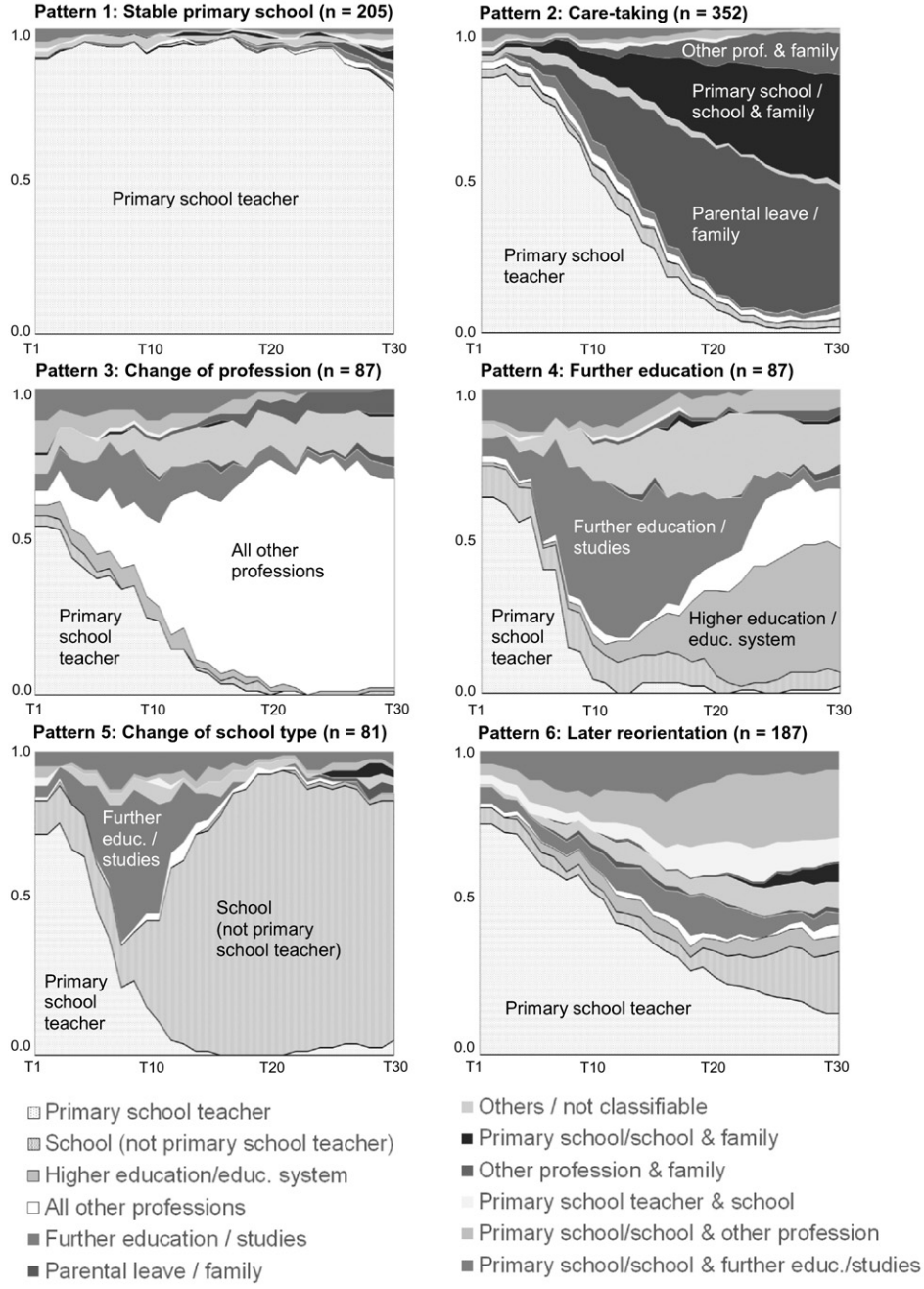

Fig. 1. Six career sequence clusters.

4.1.2. Pattern 2: care-taking

The second career pattern is the largest cluster with 352 individuals. It is characterized by an average of 10.24 periods in primary school teacher positions, 8.58 periods in motherhood/family, and 5.30 periods in primary school/school & family. The corresponding tempogram in Fig. 1 reveals that most individuals in this pattern started their career in teaching positions, but then moved into care-taking positions (motherhood/family; primary school/school & family). The vast majority of individuals is female (98%) and the average number of children is higher than in all other clusters.

4.1.3. Pattern 3: change of profession

This pattern includes 87 individuals with career sequences that are characterized by a move out of the teacher profession. Fig. 1 indicates that nearly half of the individuals in this cluster never even started working as primary school teachers, and most of those working as teachers changed the profession within the first five years of their career. On average, individuals in

this pattern worked 5.03 periods as primary school teachers and 14.13 periods in other professions (not including other school types).

4.1.4. Pattern 4: further education

This group consists of 87 individuals. Fig. 1 and an inspection of the sequences indicate that a typical career in this cluster combines further education (6.86 periods on average) in the early career with later working in secondary/tertiary education or the educational system (5.30 periods).

4.1.5. Pattern 5: change of school type

The 81 individuals in this cluster mostly worked a few periods as primary school teacher (5.52 periods on average), oftentimes followed by moves to other school types, resulting in an average of 17.38 periods working as a teacher in other school types (e.g., secondary school). As indicated in Fig. 1, several individuals in this cluster also feature a few periods of further education, before entering teaching positions in other school types.

4.1.6. Pattern 6: later reorientation

This last career pattern comprises the remaining 187 individuals from our sample, as shown in Fig. 1. Typical careers in this pattern start with teaching in primary schools, but then move into a variety of different directions. The cluster thus captures many of those individuals who do not show a good fit with any of the other career patterns, and it lacks strong internal homogeneity. Individuals in this cluster mainly worked as primary school teachers (11.79 periods on average), but later also worked in other professions (4.16 periods on average) or moved to other school types.

4.2. Hypotheses tests

Hypothesis 1suggested a lower percentage of individuals with a stable career pattern in recent cohorts compared to earlier cohorts. Based on the patterns we identified with OMA, we first dichotomized the career patterns into stable ("Stable primary school pattern") and non-stable (all five other patterns). Table 2 shows results from logistic regressions with the stable career pattern as dependent variable.

Model 1 contains only control variables. In Model 2 we added two dummy variables for cohorts 2 and 3 as additional predictors to test Hypothesis 1. Results of the dummy variable for cohort 2 indicate a significantly positive relationship ($b = 0.43$, $p < 0.05$). However, as we hypothesized a lower probability of stable careers in younger cohorts (i.e., a negative effect), this result is not in support of Hypothesis 1. Cohort 3 is not significant (-0.22, $p > 0.10$). These findings are in line with descriptive results

Table 2
Results of logistic regressions predicting a stable career pattern.

	DV: stable primary school pattern		
	Model 1	Model 2	Model 7
Intercept	0.71 (1.34)	−0.24 (1.40)	1.00 (1.47)
Gender (female = 1)	−1.12 (0.18)***	−1.11 (0.19)***	−1.10 (0.19)***
Age at graduation	−0.05 (0.06)	−0.01 (0.07)	−0.01 (0.06)
One child[a]	0.29 (0.34)	0.24 (0.35)	0.22 (0.35)
Two children[a]	−0.29 (0.25)	−0.33 (0.26)	−0.36 (0.26)
Three children[a]	−0.46 (0.29)	−0.50 (0.29)†	−0.53 (0.29)†
Four or more children[a]	−0.54 (0.42)	−0.62 (0.42)	−0.64 (0.43)
Partner employed[b]	−0.15 (0.33)	−0.09 (0.34)	−0.06 (0.34)
Partner not employed[b]	−0.19 (0.26)	−0.17 (0.26)	−0.15 (0.26)
Cohort 2[c]		0.43 (0.21)*	0.40 (0.22)†
Cohort 3[c]		−0.22 (0.27)	−0.20 (0.27)
Mother teacher			−1.01 (0.36)**
Father teacher			−0.01 (0.29)
R^2 (Nagelkerke)	0.08	0.10	0.11
Model LR test ($Chi^2/d.f.$)	43.46/8***	52.84/10***	63.26/12***

Note: $N = 827$ (due to missing data for some variables); unstandardized logistic coefficients; standard errors in parentheses.
Two-tailed tests.
[a] Reference category: no children.
[b] Reference category: no partner or no information.
[c] Reference category: cohort 1.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.
† $p < 0.1$.

provided in Table 1; they indicate that the percentage of individuals following the stable primary school pattern was 20% in cohort 1, 24% in cohort 2, and 15% in cohort 3. Overall, Hypothesis 1 was not supported.

Hypothesis 2 assumed a link between mothers' and fathers' career patterns and their children's initial vocational choices. We estimated models to predict whether at least one child of the individuals in our sample chose the teaching profession (DV: child is teacher). Although we assessed detailed career trajectories of the 999 focal individuals in the sample, we only obtained information on the initial career choices of their parents and children. Accordingly, in Hypothesis 1 and Hypotheses 3a and 3b, we used parents' careers to predict the focal individuals' career trajectories. In Hypothesis 2, however, we employed the focal individuals' career trajectories to predict their children's initial career choices.

To test Hypothesis 2, we first entered the control variables in our model (see Table 3). Note that 97.8% of the individuals in cohort 3 were born in the 1960s and their children were most likely not old enough to work as teachers at the time of data collection. Thus, we excluded cohort 3 from the following analyses, yielding a sample size of 602 from cohorts 1 and 2 only. The set of control variables in Model 3 was extended by two dummy variables, namely, whether the partner or at least one sibling is also a teacher. In Model 4, we added the individual's career pattern to predict whether their children chose a teaching career. We found a significant increase in predictive power of Model 4 (with career patterns) compared to Model 3 (without career patterns) ($Chi^2 = 23.70$, $d.f. = 5$, $p < 0.001$). A closer inspection of the results revealed that primarily the care-taking pattern accounts for these differences, because the probability of a child who is a teacher is higher for individuals that follow the care-taking pattern, compared to the reference category (i.e., stable primary school pattern).

Individuals without children obviously cannot have a child who chose the teaching profession. As a robustness test for Hypothesis 2, we therefore estimated models with a reduced sample (Models 5 and 6), comprising only individuals with one or more children. Results are qualitatively similar to the previous model, as an addition of career patterns yields a significant increase in explanatory power when comparing Model 5 and Model 6 ($Chi^2 = 25.48$, $d.f. = 5$, $p < 0.001$). Overall, Hypothesis 2 was supported.

Hypotheses 3a and 3b suggested a significant impact of mother's (H3a) and father's (H3b) profession on the stability of individual's career pattern. Results from Model 7 (see Table 2) support H3a because individuals have a lower probability to follow a stable career pattern if the mother was a teacher, too ($b = -1.01$, $p < 0.01$). The coefficient for the dummy variable father teacher is not significant in Model 7 ($b = -0.03$, $p > 0.10$). Thus, we did not find support for H3b.

Table 3
Results of logistic regressions predicting children's initial vocational choices.

	DV: child is teacher			
	Model 3	Model 4	Model 5	Model 6
Intercept	−4.69 (2.30)*	−4.32 (2.45)†	−2.63 (2.20)	−2.09 (2.35)
Gender (female = 1)	0.12 (0.24)	−0.81 (0.40)*	0.09 (0.25)	−0.94 (0.41)*
Age at graduation	0.003 (0.09)	−0.01 (0.10)	−0.003 (0.09)	−0.02 (0.10)
One child[a]	1.79 (1.15)	1.96 (1.16)	(Reference category)	(Reference category)
Two children[a]	3.09 (1.03)**	2.82 (1.04)**	1.31 (0.57)*	0.83 (0.59)
Three children[a]	3.51 (1.03)***	3.22 (1.05)**	1.73 (0.57)**	1.23 (0.60)*
Four or more children[a]	3.80 (1.08)***	3.55 (1.10)**	2.02 (0.66)**	1.56 (0.69)*
Partner employed[b]	0.40 (0.46)	0.37 (0.48)	0.35 (0.47)	0.32 (0.48)
Partner not employed[b]	0.56 (0.40)	0.54 (0.42)	0.52 (0.41)	0.50 (0.42)
Cohort 2[c]	−1.62 (0.24)***	−1.65 (0.25)***	−1.67 (0.24)***	−1.69 (0.26)***
Mother teacher	0.13 (0.36)	0.15 (0.38)	0.19 (0.37)	0.20 (0.39)
Father teacher	−0.38 (0.35)	−0.43 (0.36)	−0.50 (0.36)	−0.56 (0.37)
Sibling(s) teacher	−0.06 (0.24)	−0.02 (0.25)	−0.04 (0.24)	0.004 (0.25)
Partner teacher	0.60 (0.23)**	0.61 (0.24)*	0.58 (0.23)	0.59 (0.24)*
P1: change of profession[d]		−1.84 (1.08)†		−1.76 (1.08)
P2: later reorientation		0.14 (0.41)		0.23 (0.42)
P4: further education		0.47 (0.49)		0.58 (0.50)
P5: care-taking		1.36 (0.45)**		1.53 (0.47)**
P6: change of school type		0.30 (0.48)		0.39 (0.49)
N	602	602	512	512
R^2 (Nagelkerke)	0.27	0.32	0.22	0.28
Model LR Test ($Chi^2/d.f.$)	115.27/13***	138.97/18***	79.42/12***	104.90/17***

Note: unstandardized logistic coefficients; standard errors in parentheses.
Two-tailed tests.
[a] Reference category: no children (one child for reduced sample in models 5 & 6).
[b] Reference category: no partner or no information.
[c] Reference category: cohort 1; cohort 3 not included (see text for details).
[d] Reference category: pattern 3: stable primary school.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.
† $p < 0.1$.

5. Discussion

Various economic and societal developments over the past decades are widely believed to have had an impact on individuals' careers (e.g., Arthur & Rousseau, 1996; Hall, 2002). To date, however, we still have a limited understanding of whether and how individuals' career patterns may have changed as a result thereof. Following calls for more quantitative studies based on objective career data (e.g., Inkson et al., 2012; Rodrigues & Guest, 2010) and for research on influencing factors of occupational career patterns (e.g., Dlouhy et al., forthcoming), this paper aims to advance research by empirically exploring career patterns and effects of occupational inheritance (i.e., a socially constructed career boundary, Inkson et al., 2012) among a sample of 999 primary school teachers in Switzerland in three cohorts. First, the focus on occupational career patterns over the last four decades of the 20th century allows adopting a historical perspective. This addresses the dearth of knowledge on potential influences on career pattern stability, particularly in the context of the assumed major changes in career opportunities for women (e.g., Jepsen & Choudhuri, 2001; Zytowski, 1969). Second, based on these career patterns, the results provide new insights into the—hitherto neglected—effects of occupational inheritance on children's career patterns beyond their first vocational choice. Third, by applying OMA, the study describes the to date most detailed career patterns of (former) teachers, thereby building on, but clearly extending, earlier studies on teachers' (e.g., Huberman, 1989; Lindqvist et al., 2014) and general occupational career patterns (e.g., Jepsen & Choudhuri, 2001).

Hypothesis 1 postulated that the percentage of individuals with a stable career pattern is lower in recent cohorts than in earlier ones. Although we found significant cohort differences in the percentage of individuals with stable career patterns, there was no linear trend towards less stable patterns in more recent cohorts. Instead, our data resembled a slightly U-shaped curve because individuals of the middle cohort (1974) followed stable career patterns more frequently than individuals in the other two cohorts (see Table 1). The biggest pattern membership shift between cohorts seems to have occurred from pattern 5 ("change of school type") to pattern 3 ("change of profession"). This may arguably be the result of the widely increased non-educational professional opportunities for women in the cohort of 1984 compared with the cohort of 1964. Thus, the results reflect both occupational and societal developments over that period of time. Overall, however, teaching is a relatively stable profession, and Switzerland is a country with widespread traditional work-related values (estimated to be prevalent in about a third of the population, Gerber, Wittekind, Grote, & Staffelbach, 2009). Therefore, taking into account the cultural context, investigating Swiss teachers may not result in a significant linear reduction in individuals with stable career patterns over three cohorts, although educational research has argued that teachers have become increasingly more self-directed regarding their career decisions (e.g., W. Herzog et al., 2007). Indeed, this study only found about 20% of all teachers to follow a stable pattern. Yet, beyond these specific contexts, results from Hypothesis 1 clearly corroborate broader conceptual (e.g., Inkson et al., 2012) and empirical research on more recent career patterns (e.g., Biemann et al., 2011; Biemann et al., 2012; Kattenbach et al., 2014). Such studies indicate that although the context of careers may have changed over the last decades, at least in Europe individual career patterns may not have undergone as fundamental adjustments as has often been claimed in the "new careers" literature (e.g., Arthur & Rousseau, 1996; Hall, 2002). Moreover, the results provide empirical evidence for the claim that "old" and "new" career patterns can coexist (e.g., "stable primary school" vs. "change of profession" pattern) and that any one career trajectory may well comprise stable and turbulent phases (Inkson et al., 2012). Also, in support of Jepsen and Choudhuri (2001), the results indicate that crossing occupational boundaries occurs more frequently in early career stages. Lastly, our results corroborate and extend previous research on female careers (e.g., Mainiero & Sullivan, 2005). The detailed career patterns in this study imply that particularly women with children seem to have shifting career priorities and tend to balance work and non-work domains differently in various phases of their careers (e.g., "care taking" pattern). This supports researchers (e.g., W. Herzog et al., 2007; Zytowski, 1969) arguing that family-related responsibilities may still strongly affect (particularly female) teachers' careers, despite an overall convergence of male and female career trajectories (McMunn et al., 2015).

In Hypothesis 2, we postulated that having a mother or father with a stable career pattern (as compared with parents with a non-stable career pattern) increases chances that children will choose their parents' profession as their initial vocational choice. Hypothesis 2 was supported in a sample of teachers, but—beyond the occupational context—this finding is in line with various arguments for the "structural", contextual nature of careers (e.g., Young et al., 2002) and studies on the relevance of relational influences on career development (e.g., Jodl et al., 2001). Yet, our findings extent previous research, adding a new facet to the occupational inheritance literature in which the potential influence of parents' career patterns on their children's careers has not yet been investigated. The results show that not only parents' profession but also differences in parents' sequences of jobs and positions over time affect children's first vocational choices. Thus, building on Kirkpatrick Johnson and Mortimer (2002), it seems likely that not only *what* happens to an individual's career will affect this person's work values but also *when* it happens. This finding provides further empirical evidence for the relevance and potential benefits of applying sequence analysis in career research (e.g., Biemann & Datta, 2014; Dlouhy & Biemann, 2015) and for the exploration of career patterns (Dlouhy et al., forthcoming; Vinkenburg & Weber, 2012).

Lastly, in Hypotheses 3a and 3b, we argued that after entering the workforce having a mother (H3a) or father (H3b) working in the same profession reduces an individual's likelihood of pursuing a stable career pattern. We found support for H3a, but not for H3b. Two aspects are particularly noteworthy about this finding: First, in line with the corresponding literature (e.g., Aldrich & Kim, 2015; Werts, 1968; Whitbeck, 2000), we found evidence of occupational inheritance in our sample. However, surprisingly, the effects were only significant for mothers, not for fathers. That is, despite numerous studies indicating a strong effect of fathers' profession on their children's vocational choices (e.g., Blustein et al., 1991; Laband & Lentz, 1983; Werts, 1968), we could not confirm that finding in our sample. Instead, we found that mothers' profession had a significant effect. This clearly supports calls for

studying mothers' role in shaping their offspring's vocational values more closely (e.g., Trice et al., 1995). However, in further analyses, we could neither confirm claims that the influence of the same-sex parent may be stronger than that of the opposite-sex parent (Kirkpatrick Johnson & Mortimer, 2002) nor assumptions that girls are less prone to occupational inheritance than boys (Blustein et al., 1991; Goodale & Hall, 1976).

Second, individuals whose mothers were teachers were significantly less likely to pursue a stable career pattern as teachers. That is, having a teacher as a mother significantly *reduced* the chances of a young teacher to pursue a stable career pattern. This finding is in stark contrast with the—often implicit—assumptions in the occupational inheritance literature that children not only have a greater-than-chance tendency to choose occupations that are very similar to those of their parents (Aldrich & Kim, 2015) but also to remain in that profession. In this sample, occupational inheritance seemed to act as a structuring force for the first vocational choice of teachers, as expected and frequently documented (e.g., Werts, 1968; Whitbeck, 2000). However, when individuals became more agentic in their career behavior after graduation, not least based on their experienced (rather than expected) fit between their work values and the professional reality, those whose mothers worked as teachers left the profession significantly more frequently than other individuals. In other words, after entering the workforce, traditionally known "converging" aspects of occupational inheritance seem to become weaker for individuals, whereas "diverging" aspects (i.e., factors leading them to leave the occupation) gain in importance.

In order to explain this finding, several effects may be considered, some of which clearly distinguish teaching from professions previously studied in the context of occupational inheritance, such as doctors or entrepreneurs. First, following one's parents into teaching does not provide most of the typical benefits that accompany occupational inheritance in other professions (Aldrich & Kim, 2015; Lentz & Laband, 1990). For example, brand-name loyalty and physical assets are simply non-existing for teachers, and parents' business contact network is almost completely irrelevant for them. Therefore, opportunity costs to leave the teaching profession are arguably substantially lower than they are for other professions.

Second, the Swiss educational system forces adolescents to make vocational decisions relatively early (the individuals in this study had to make their decision to become teachers when they were about 15 years old), which leads to more conservative vocational choices (Schnabel et al., 2002). It can be assumed that children of teachers are equally likely as any other children to choose their parents' profession due to a lack of self-direction, due to a sense of duty to follow the family tradition (Mortimer, 1974) or due to positive feelings towards their parents (Whitbeck, 2000). However, as argued above, for those who realize that they do not like their chosen career path, leaving teaching may be easier than leaving other professions. This may be particularly true for women (representing two-thirds of our sample), whose occupational opportunities (i.e., another socially constructed career boundary) have multiplied over the last few decades. In addition, there was an almost complete lack of unemployment in Switzerland until the early 1990s with unemployment rates constantly below 1% (Frick & Lampart, 2007). For the teachers in this study this may have further eased occupational transitions because on the dry Swiss labor market teachers with their broad set of transferable skills (Latzke & Schwarzl, 2016) were highly valued in various industries outside education (W. Herzog et al., 2007). Under such circumstances, occupational inheritance may become particularly relevant (i) when it "serves to buffer young women from pressure toward foreclosing on career choices" (Blustein et al., 1991, pp. 47–48) in a mainly female-dominated occupation like teaching and (ii) when it leads students who aim to follow their parents as teachers to suboptimal preparation due to their felt "calling" (Whitbeck, 2000). Adopting an "agentic" view on careers, such aspects may thus further help to explain the fact that teachers' children leave the profession more frequently than children whose parents are not teachers *after* the completion of their first vocational training, when existing social boundaries begin to dissolve, family tradition becomes less prescriptive (Weick, 1996, p. 45), individual career orientations become stronger (Schein, 1978), and when individuals are confronted with the professional reality (Hall & Chandler, 2005; Whitbeck, 2000).

6. Limitations and future research

We investigated career patterns between the mid-1960s and the end of the 1990s of individuals starting in one profession and one geographical location only, which was a unique opportunity with several benefits. However, our approach also had various potential limitations. First, future research should examine whether the finding that occupational inheritance works in exactly opposite directions prior and after teachers' first vocational choice is applicable to different cultural and/or professional contexts—and whether the findings (and the underlying career patterns) can be replicated in the current career context. Related to that point, future research should also focus on the question whether our findings are a consequence of the fact that teaching (particularly at primary school level) is a predominantly female-dominated profession or the result of other influencing factors beyond gender and profession. All of this would help to understand more precisely if and to which degree our findings can be generalized beyond the specific context of teachers' careers.

Second, this study is one of the first to take into account individuals' various parallel occupations (e.g., teacher/mother), and thereby provides a novel and much richer approach to analyzing individual career patterns than previous studies. Nevertheless, our approach still results in a substantial reduction of complexity in the data. Therefore, we cannot mirror individuals' career trajectories fully (e.g., for individuals with more than two parallel activities, only the two main ones could be taken into account). In a profession such as teaching, where part-time work and portfolio careers are widespread (W. Herzog et al., 2007), these methodological limitations may affect the results. For future research, it would therefore be promising to refine our statistical approach to analyze portfolio careers with more precision. For example, this may help researchers to learn how, exactly, mothers' career patterns affect their children's career decisions. Furthermore, we used a relatively broad category to capture professions beyond

teaching (coded as "other profession") because we were primarily interested in deviations from stable primary school teaching. A finer-grained conceptualization of this category might be a fruitful avenue for further research.

Lastly, as a secondary data analysis for which collecting additional data is not viable, this study faced various constraints typically associated with analyses of longitudinal large scale datasets (Diemer, 2008), such as the limitations of having to cope with a set of variables originally defined for slightly different research purposes. Therefore, for future research, it would be particularly promising to investigate career patterns across two, ideally three generations. For example, this would allow researchers to gain a better understanding of how (grand-)parental career patterns affect children's (and grandchildren's) career patterns. In our data, although we had detailed information on career patterns of the 999 participants, we only had limited knowledge of their parents', partners', and children's careers. Particularly, we only knew the first vocational choice of participants' parents and whether or not participants' children chose teaching as a first vocational choice. However, our findings indicate that it would be relevant both for research on careers and on occupational inheritance to investigate such questions in more depth.

7. Conclusions

Based on sequence analysis in a large dataset, we contribute to the discourse on broader changes in individual career patterns as well as their structural and agentic forces by providing rare empirical insights into the career behavior of three cohorts of (former) Swiss teachers between the mid-1960s and the late 1990s. Thereby, first, we respond to calls for more research on career patterns and their stability, particularly across occupations and the work-non-work domain. Our findings indicate that substantial changes in a socially constructed career boundary (occupational opportunities for women) do not automatically result in corresponding changes in career patterns, which adds a new facet to the careers literature. Second, our study addresses calls for more research on factors affecting career patterns. We identify parents' profession and parental career patterns as hitherto neglected, socially constructed boundaries that affect individual career patterns for years after graduation. Lastly, our results show that although the proverbial apple may not fall far from the tree, it will eventually roll substantially further away than often assumed. That is, although teachers' children may be prone to occupational inheritance, and are thus likely to choose teaching as their first vocational choice as well, they will move out of teaching and pursue other professions after graduation more frequently than children of non-teachers.

Parents' profession is not the only (and arguably not the most salient) boundary that affects individuals' careers. However, as shown in this study, occupational inheritance has hitherto unknown long-term effects on individual career behavior. This is a new insight that substantially extends previous findings by focusing beyond the first vocational choice, and it sheds new light on the different effects occupational inheritance may have at different stages of an individual's career. These effects (i.e., increased occupational turnover of individuals who follow their parents' vocational choice) have various implications for future career and vocational behavior research. For example, they highlight the need for more research on occupational inheritance beyond the first vocational choice. In addition, supporting previous claims regarding the relevance of career patterns for counseling (e.g., Jepsen & Choudhuri, 2001; Super, 1954) the findings of this study are of practical relevance, particularly in professions such as teaching, where occupational inheritance is common and shortages in the labor market are frequent. For example, our results can support school authorities, principals and institutions of teacher education when developing programs to retain teachers at different career stages. Also, the findings indicate that it might be worth investing more resources in vocational guidance in schools, particularly to support teenagers who consider pursuing their parents' professional path in their vocational decision-making process. More generally, these new insights can be useful for HRM practitioners and career counselors, for example, when it comes to sensitizing individuals to their career motives and to advising them on planning their career development in the long run.

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