



Career patterns in the XX century. An interplay of gender, family and career success

Maxim Kovalenko Dimitri Mortelmans

Een onderzoek in opdracht van de Vlaamse minister van Financiën, Begroting, Werk, Ruimtelijke Ordening en Sport Kovalenko, Maxim, Mortelmans, Dimitri

Career patterns in the XX century. An interplay of gender, family and career success

Kovalenko, Maxim, Mortelmans, Dimitri.– Steunpunt Werk en Sociale Economie / Antwerpen: CELLO, Universiteit Antwerpen, 2011, 70 p.

ISBN-

Copyright (2011) Steunpunt Werk en Sociale Economie Parkstraat 45 bus 5303 – B-3000 Leuven T:32(0)16 32 32 39 - F:32(0)16 32 32 40 <u>steunpuntwse@econ.kuleuven.be</u> <u>www.steunpuntwse.be</u> Universiteit Antwerpen Centrum voor Longitudinaal en Levenslooponderzoek (Cello) Stadscampus - Sint Jacobstraat 2 - 2000 Antwerpen

Niets uit deze uitgave mag worden verveelvoudigd en/of openbaar gemaakt door middel van druk, fotokopie, microfilm of op welke andere wijze ook, zonder voorafgaande schriftelijke toestemming van de uitgever.

No part of this report may be reproduced in any form, by mimeograph, film or any other means, without permission in writing from the publisher.

Table of contents

1	I	INTRODUCTION	5
	1.1	CAREER PATTERNS AND GENDER: THE BACKGROUND	6
	1.2	PRICES AND REWARDS OF TRANSITIONALITY	8
	1.3	B HYPOTHESES RELATED TO FAMILY INDICATORS	10
	1.4	HYPOTHESES RELATED TO CAREER SUCCESS	11
2	I	METHODOLOGY	
	2.1	L Data	13
	2.2	2 SAMPLE CHARACTERISTICS	13
	2.3	B OPTIMAL MATCHING ANALYSIS: A BRIEF INTRODUCTION	14
3	I	RESULTS	19
	3.1	L CAREER TYPOLOGIES	19
	3.2	2 INTER-CLUSTER DIFFERENCES	
4	I	DISCUSSION	45
	4.1	Gender and family	45
	4.2	2 Subjective career success	47
	4.3	8 RETIREMENT AGE	48
	4.4	OTHER COVARIATES	49
5	I	POLICY IMPLICATIONS	50
	5.1	Gender-related differences	50
	5.2	2 RETIREMENT	51
	5.3	B Work-family balance	51
6	(CONCLUSION	
7		ACKNOWLEDGEMENTS	
~			
8		BIBLIOGRAPHY	
9	1	APPENDIX I: UNGROUPED CLUSTER MEANS	59
1	0 /	APPENDIX II: PART- AND FULL-TIME WORK	61
	10.	.1 Men	61
	10.	.2 WOMEN	63
1	1	APPENDIX III: VOLUNTARINESS INDEX	

12	APPE	NDIX IV: VARIABLE CODING	/0
	11.2	WOMEN	57
	11.1	Men	55

1 Introduction

Career patterns have been undergoing substantial transformations during the last several decennia. A larger share of the XX century was characterized by the ideal type of so-called traditional career. Most readers will be familiar with the concept - it refers to the linear succession of working positions with one or two employers, usually marked by a certain emphasis on the progress in terms of external motivators, such as salary or status.

This ideal type is no longer the reality for most workers of today. The dynamic of the latest social and economic changes, including globalizing markets, technological advances and cultural transformations exert a tremendous pressure on the stability of jobs (Arthur & Rousseau, 2001), as well as their concomitant (e.g. psychological) characteristics (Briscoe & Hall, 2006; Briscoe, Hall, & Frautschy DeMuth, 2006).

New career patterns emerge in the light of that pressure. An average worker must expect to switch between multiple employers during the course of career; an average Belgian employee is estimated to work at six different organizations during his/her lifetime¹. The traditional psychological contract stressing the value of organizational loyalty and job stability is void; terms such as employability and flexicurity describe the ideal contemporary arrangements. Subjective markers of career success gain importance, such as intrinsic meaning of the job, while the emphasis on pay and promotion declines (Hall, 1996a; Peiperl, Arthur, & Goffee, 2000). Responsibility for career management is lain on the shoulders of the individual, and no longer is the prerogative of the employing organization, as was the case with traditional working arrangements (Defillippi & Arthur, 1994; Hall, 1996b).

While it is certain that the change is underway, research on their extent and properties remains limited (Gunz, Evans, & Jalland, 2000; Segers, Inceoglu, Vloeberghs, Bartram, & Henderickx, 2008; Valcour & Tolbert, 2003). Alternative career patterns may be new, but their development unavoidably stems from the pre-existing social and economic conditions. The pressures posed by the changing economy are bound to interact with the diversity of the mentioned conditions, and may therefore produce variant outcomes for different strata of the working population. It is clear, for instance, that the transformation of the traditional career logic is not unequivocally beneficial (Gerber, Wittekind, Grote, & Staffelbach, 2009; King, Burke, & Pemberton, 2005; Van Buren, 2003), as some of the optimistic initial accounts attest. Increased career transitionality may be used as a strategic resource by individuals equipped to do so in terms of career capital. For others, however, switching jobs results

Manpower survey, as reported by *Nieuwsblad* on 28.02.2011 (downloaded from http://www.nieuwsblad.be/article/detail.aspx?articleid=DMF20110228_019)

in precarious working arrangements without much prospect for permanence of employment or income, not to mention the negative psychological consequences due to heightened uncertainty or stress.

The distribution of costs and benefits of the various career paths—differentiated by the patterns of labor market transitionality—forms the focus of this inquiry. This study has predominantly an explorative nature, although we do formulate several general hypotheses based on the literature. After setting the theoretical background, we will (1) construct a career taxonomy based on job mobility patterns and (2) evaluate the differences between established career types in terms of family variables, career success and labor market exit. Separate models for men and women will be presented.

1.1 Career patterns and gender: the background

Let us return to the question of pre-existing socio-economic conditions, in which the post-industrial career patterns have been developing. One of the most important antecedents in this process is the gendered division of labor, as this phenomenon has substantially defined the labor markets of the previous century, and continues to be of influence today (Marler & Moen, 2005). Our current analysis rests on three theoretical threads in the literature in regard to gendered distinctions in work.

The first pertains to the objective (in the sense of being directly observable statistically) divisions between men and women in terms of labor market participation, with the concomitant vertical and horizontal segregation. During the Second Industrial Revolution at the turn of the XX century, the share of women participating in the labor market has sharply decreased after a brief initial spike, subject of limitations of both patriarchal, legal and class-related nature (Edgell, 2006). The female workforce at the dawn of the XX century was mostly comprised of the unmarried and working-class women (Goldin, 2006; Scott & Tilly, 1975), which went hand in hand with a certain degree of stigmatization of working women (Burstein, 1994; Murolo, 1997).

Participation of women on the labor market has significantly increased once again in the second half of the XX century (Ferber, 1982; Shank, 1988), especially in countries with initially low participation rates (Jaumotte, 2003). A substantial share of female workforce has been employed part-time, about one quarter of all working women on average in the OECD countries in 1999 (idem). The massive influx of the female labor force has, among other factors, contributed to the shattering of the normative (both in statistical and ideological sense) character of the traditional career, bringing about a greater variety of career patterns.

Second, the objective situation on the labor market went hand in hand with the corresponding ideology regarding the suitability of different kinds of work for men and women, and the so-called "natural" predispositions of both gender towards particular tasks within familial and working spheres. It emerged at approximately the same time as (albeit somewhat varying per country) the division between domestic and paid work in the context of industrialization (Edgell, 2006). This view, often labeled as *dominant conception of work* has established itself as an ideological and statistical norm, both these dimensions supporting and reinforcing each other. The dominant conception of work (also referred to as *the gender schemas* (Marler & Moen, 2005)) is closely related to general gender role expectations in their work-related aspects—per definition. It entailed pronounced gender divisions pertaining to distribution of familial work, the man taking the role of bread-winner in the household, and the woman being in full-time charge of domestic tasks (Edgell, 2006).

In the light of our current analysis it is not sufficient to merely state these differences, it also needs to be noted, that deviations from the normative patterns were often stigmatized with varying degree of social penalties, the stigma reflecting not only upon the individuals in question, but also—by extension—on their spouses and sometimes other members of the family (Levant & Pollack, 2003). For example, the husband of a working woman could have been seen as having failed to comply with the norm of adequate breadwinner. It is of course not surprising, that deviations from these procrustean ideological norms were found predominantly in the lower socio-economic population strata, where the scarcity of material means dictated its own course of intra-familial work division, just as today the flexible and self-driven careers of managers may imply an ideological norm for the whole labor market, weaker strata of which will almost inevitably fail to comply due to lack of personal resources to achieve the ideal.

Finally, the empirical research shows, that success in one's working life was, and still is perceived differently by men and women (Clark, 1997). The explanation of that divergence entails, among other factors, different emphases on family and work, and the importance thereof to the individual identity, to some extent fueled by the mentioned work ideology. Women derive personal meaning and satisfaction from multiple domains of life, including, but not limited to work (Forret, Sullivan, & Mainiero, 2010; Sullivan & Mainiero, 2007). For men, on the other hand, work fulfills a much more central role in shaping their identity (Cinamon & Rich, 2002).

In sum, we can safely assert that the era of the traditional career was heavily gendered. Post-industrial career patterns emerge not in social vacuum, but within the confines of the structural and cultural conditions briefly sketched above. We can therefore expect, that not only will there be a bias in terms of pre-disposition towards these new career patterns on behalf of one gender, but that there is a possibility that men and women will develop different types of post-traditional career patterns, that should be discerned from each other, even if they share some of the properties (e.g. the protean career orientation). To use a metaphor, the same seeds of post-industrial career drivers, planted in the different soils of diverging social strata will yield variant breeds of the *new career*. The observed commonalities may stem from the identical pressures of the pre-existing conditions. Transitional careers of men might thus be different from transitional careers of women, in the very same fashion, for example, as self-driven careers of top managers may be different from self-driven careers of part-time housewives, even if they happen to share certain commonalities (e.g. psychological orientations).

1.2 Prices and rewards of transitionality

If the previous passages have sketched the relationship between work and gender in regard to normative differences (which forms an important dimension of our further analysis), in what follows we will elaborate on the effects of career transitionality through the lens of gender. In our empirical analysis career transitionality will serve as basis to discern between career patterns, and with mediation of those—between different kinds of career outcomes.

The subject of career transitionality acquires its special relevance in the context of career patterns of today, the emergence of which has been a subject of substantial debate, but somewhat lacking empirical research. Multiple conceptualizations of the said patterns exist, including boundaryless career (Arthur, 1994; Arthur & Rousseau, 2001), protean career (Hall, 1976, 1996b, 2004), intelligent career (Arthur, Claman, DeFillippi, & Adams, 1995), portfolio career (Mallon, 1999), multi-directional career (Baruch, 2004). The theoretical pertinence of the boundaryless career framework to our current subject most certainly stands out, since physical mobility is per definition the most important dimension of the boundaryless pattern (Arthur & Rousseau, 2001). In short, it is defined as a career, which transcends the boundaries of a single organization.

Many studies do in fact conceive and/or operationalize the boundaryless career solely as transition between multiple organizations (Inkson, 2006; Segers, et al., 2008). This often stands in the opposition with the career pattern that exhibit little or no mobility, a trajectory corresponding to the so-called

traditional career (Sullivan, 1999). We, however, choose to strictly differentiate between the boundaryless career per se (as a total construct), and the characteristics of its transitionality (as a single dimension thereof). First, the empirical research cautions us against using job mobility alone as proxy for the boundaryless career construct (Briscoe, et al., 2006). Second, we do so based on the theoretical considerations, contending that it is the *meaning* of transitionality between jobs draws the line between the precarious career, characterized by unplanned instability, lower earnings and subjective career satisfaction on one hand, and the "authentic" boundaryless career, where (potentially similarly looking) job mobility is strategically and consciously used to enhance one's career prospects and/or immediate gains in terms of either material or psychological benefits (Forret, et al., 2010).

Although we ultimately are interested in the career patterns of today (both for theoretical as well as practical reasons), the look at the working arrangements of the XX century allows us to understand the conditions in which the post-industrial careers have been developing, from the standpoint of gendered career patterns based on transitionality. Furthermore, using our data we can challenge (at least in certain sense) the pervasive and simplistic view, that the traditional career was the dominant pattern of the period under study (see also Guest & Sturges, 2007).

Finally, we are interested in the outcomes of transitional career patterns, as these effects are likely to persist in the contemporary career arrangements, at least to a degree, correcting for the changes in the globalizing socio-economic context. The continuity of these effects between the traditional and post-industrial career types can to some extent be clarified based on the empirical evidence we have previously reviewed (Kovalenko & Mortelmans, 2010).

The contemporary empirical research on transitional career characteristics suggests, that different career patterns are tied to variant career outcomes, e.g. in terms of income, career satisfaction and family variables (Eby, 2001; Eby, Butts, & Lockwood, 2003; Gerber, et al., 2009; Marler, Woodard Barringer, & Milkovich, 2002; Valcour & Tolbert, 2003; Volmer & Spurk, 2010).

In one of the previous reports of the WSE series De Winne, Stynen, Gilbert and Sels (2009) have pointed out the ambivalence of career transitions in terms of their outcomes. Job mobility per se does not necessarily serve the goal of higher employability, depending on the exact circumstances of that mobility (see also Van Buren, 2003). It introduces several potential risks that inherently characterize the careers of the highly mobile employees (Beck, 2000; Hall, 1996a).

Combining this thesis with our own discussion of the consequences of the post-traditional career patterns (Kovalenko & Mortelmans, 2010), we must conclude that not only different career transitionality patterns have different outcomes and relationships to their covariates, but also that the distribution of these outcomes may be rather biased. Some labor market strata would enjoy more of the positive effects of transitionality, e.g. those in executive/managerial careers (Cheramie, Sturman, & Walsh, 2007; Ensher, Murphy, & Sullivan, 2002), while others will have to deal with its less pleasant consequences, such as heightened stress or unstable continuity of work (King, et al., 2005; Reitman & Schneer, 2003).

In the context of the current analysis we will discuss several career outcomes and covariates.

1.3 Hypotheses related to family indicators

The literature on the post-traditional career patterns suggests, that women are more likely to follow alternative career paths, as they allow to better manage the balance between work and family (Briscoe, et al., 2006; Eby, 2001; Marler & Moen, 2005; Marler, et al., 2002; Reitzle, Körner, & Vondracek, 2009; Segers, et al., 2008; Valcour & Tolbert, 2003; Valgaeren, 2008). In terms of career transitionality we can hypothesize two things, based on this thesis. First, women's careers are to exhibit a more variegated palette of career patterns than men's. This is one of the factors, why the contemporary boundaryless careers may be more typical for women—as the preconditions for them to develop were already present in the previous decennia.

We expect men, on the other hand, to have a proclivity towards the (semi-)traditional career patterns. Men have much less variety in their career patterns, and tend to be "stuck" in their traditionallyoriented working roles (Goldberg, 1987; Hakim, 1996). The ideological premises in regard to women's work have been somewhat weakened due to the success of the feminist discourse, although their traces are still to be found in today's practice (Forret, et al., 2010; Litzky, Purohit, & Weer, 2008; Marler & Moen, 2005). The constraining gender effects continue to weigh on men, having a range of negative outcomes (Forret, et al., 2010; Goldberg, 1987; Levant & Pollack, 2003). It can be argued that the rigidity of work-related male roles may conflict with the needs of flexibilization of the labor supply.

The second thread of hypotheses is less straightforward, and concerns the combination of work and family, and its repercussions for both genders. While we do not reproduce the whole work-life balance debate in this analysis, we do contend that the issue of this balance itself is a motivator for certain career types.

Research shows, that the influx of women into the labor market has led to the reshaping of household labor division into what is called "the double shift" for women (Hochschild & Machung, 1989). While men mostly continue to adhere to their breadwinner role, women tend to combine tasks in both familial and working spheres (Mortelmans, Ottoy, & Verstreken, 2003). As consequence, the post-traditional working arrangements can provide better options for work-life balance, due to their inherent flexibility. Following the logic of the *gender schemata* (Marler & Moen, 2005), we can hypothesize that women in alternative career arrangements will have more children and more stable marriages. Women in traditional career patterns will have fewer children and less stable marriages, than their counterparts in the hypertransitional paths (the comparison with family-oriented career profiles is invalid due to differences in work-family conflict dynamic). Men, on the other hand, are expected to have stables marriages and a larger number of children, when following the traditional career path. As we have already mentioned, individuals pursuing a career incongruent with the prevalent gender norms, may encounter (or in our case—may have encountered) certain structural and ideological resistance (Marler & Moen, 2005; Neugarten, Moore, & Lowe, 1965).

While on the individual level being in a marriage and having children remains a personal choice, the consequences of familial instability and lower fertility rates on the level of society entail both social and economic costs (and risks). Therefore, in terms of policy, these can be seen as a negative outcome, tied to specific career patterns.

1.4 Hypotheses related to career success

The persistence of gender schemas has repercussions in regard to the construction of career success, the process that seems to be enacted differently for men and women. While for men work and its status derivatives are quite central as a part of their identity, women are said to base their self-views on multiple life areas, including relationships with others, family life and, of course, work (Forret, et al., 2010; Sullivan & Mainiero, 2007). This implies that women have a larger set of aspects, which can positively influence a sense of satisfaction in life, even if there are shortcomings in one/some of them.

Of course, we need to distinguish between the general satisfaction in life and satisfaction with one's career, disregarding their mutual correlation. Nevertheless, on the grounds of the mentioned findings we will accept as (null) hypothesis, that women in non-traditional career patterns will have a tendency to experience higher levels of career satisfaction, due to better chances of having "the best of both worlds": complying with the image of a good mother, but also enjoying some of the rewards that

employment brings. This hypothesis rests on the assumption brought forward in the mentioned empirical research, that the traditional career pattern is not conductive to the combination of both areas, and therefore forces a certain choice between the two. Men, on the other hand, are expected to have higher satisfaction scores in traditional working arrangements, in comparison with their hypertransitional counterpart.

2 Methodology

2.1 Data

The data for the current analysis were collected during the 3rd wave of Survey of Health, Ageing and Retirement in Europe (SHARE²). One of the question batteries included in the third wave (called SHARELIFE), investigates the life history of the European population in the second half of the XX century³. The sample is representative of that population for 13 European countries, including Belgium. For the purposes of the current inquiry, we have focused on the Belgian data alone to be able to go into deeper detail, leaving an international comparison for later analysis.

The focus of SHARELIFE survey is on the retrospective inquiry into various domains of individual life, for the totality of its duration. It thus contains complete histories of working lives, quality of work, relationships (marriage and cohabitation) and children rearing, aside from other aspects that are less pertinent to our analysis. Due to the coexistence of these interrelated aspects of career and their covariates in the same dataset, SHARELIFE provides a rare opportunity to conduct the analysis of individual careers over the whole period of respondents' working life.

2.2 Sample characteristics

The Belgian sample contains 2934 respondents. Not all of them have carried out paid work, the working portion of the sample consisted of 2583 respondents, 48.23% of whom are men and 51.77% women. 1.51% of the final sample were below the age of 50, 28.08% between 50 and 59, and the remaining 70.41% were 60 or more years old. Most careers began between 40ies and 80ies (see figure 1).

² 3 http://www.share-project.org/

The respondents were 50 years or older at the beginning of the study in 2004 (excluding younger spouses).

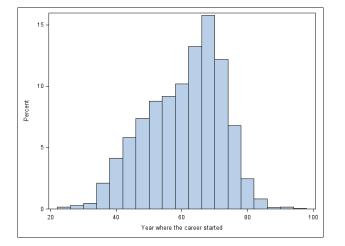


Figure 1: distribution of career sequence start timing (men and women)

This implies that World War II might have had an effect on the beginning portions of some careers. Preliminary analysis has however not revealed any particularities of career trends in this regard, and since it is analytically impossible to discern the effects of the war from other factors, we will disregard the issue altogether.

Some of the respondents in the total sample were retired at the time of the survey, while others still remain active on the labor market:

	R still works	R is retired
Men	26.07	73.93
Women	24.14	75.86
Total	25.07	74.93

2.3 Optimal Matching Analysis: a brief introduction

The core of our analysis is based on the technique called Optimal Matching Analysis (OMA). OMA has entered the repertorium of social sciences relatively recently, stemming originally from computer sciences. It has been successfully applied in other disciplines, e.g. DNA analysis in biology. Notwithstanding its relatively short history in social sciences, OMA has been gaining increasing popularity in the recent years (Abbott, 1990; Halpin, 2010). Belonging to the group of sequence analysis techniques, it allows obtaining dissimilarity measures (distances) between sequences of events or time-bound states. In the case of career, it is one of the few techniques that capture the phenomenon in its totality on the temporal dimension, without reduction of information.

Consider the following example. There are two sequences: A-A-B-B and A-A-C, which in our case can be interpreted as work statuses. The second sequence can be matched to the first one by adding one element (B) and by substituting one element (C with B). In the same manner, the first sequence can be transformed by deleting one element, and substituting one as well. Each of these operations (insert, delete and substitute) carries an abstract cost, defined prior to the transformation. The sum total of the transaction costs is then a measure of distance between two sequences. A distance matrix obtained in this fashion can be subjected to statistical techniques such as cluster analysis or multidimensional scaling (Lesnard, 2010).

OMA has received quite substantial methodological critique, most of it being concerned with the validity of the process of constructing transformation cost matrices. It has been pointed out, for instance, that the choice of the ratio of indel (insertion and deletion) to substitution costs has significant influence of the resulting cluster solution (Bison). Another line of criticism is that in contrast to computer sciences or biology, sequence transformation operations have no intrinsic meaning in social sciences (Wu, 2000). Halpin (2010, p. 3) notes in this regard, that the transformation operations are "atemporal operations that involve comparing two sequences at a particular site". They are merely an abstract expression of distance, and do not directly relate to the events within sequences. Adhering to the same position, we will disregard the issue of meaning inherent to the transformations.

One of the remedial venues suggested in the recent literature on the subject is to derive transaction costs based on the frequencies of transitions between states in a sequence, whereby most common transitions would signify relatively proximate states and lower transaction costs by the same token (Lesnard, 2010). In our initial analysis we have attempted both options, first using fixed transaction costs (indel = 1, substitution = 2). To test the robustness of the solution we have then applied substitution cost matrix based on transition frequencies. Both solutions yielded closely similar solution results after clustering, except for minor variations in cluster sizes. This outcome suggests that in our particular case (considering the manner of sequence coding) the OMA method is robust. Throughout the analysis we have retained the variable substitution cost matrix as the basis for distance measures.

2.3.1 Factors (independent variables)

Following the career definition of Arthur, Hall & Lawrence (1989) that we have rendered above, we have constructed the OMA input sequences as follows. A career begins after the respondent leaves full time education and continues until the respondent retires (or until 2010, if the respondent is still at work). Most of the respondents in the sample have retired at the point of data collection, as previously shown.

First job in the career sequence is coded "1", second job "2" and so forth, code N signifying the Nth job in the career sequence. Unemployment, economic inactivity (having no job and not looking for one – for various reasons), as well as retirement receive separate codes (0,-1 and 88, respectively). Although information on part- and full-time character of the jobs involved was available, we chose not to include these statuses in the basic sequences to avoid too large number of clusters. Job sequences encoded in terms part- and full-time jobs as a separate cluster characteristic can be found in the Appendix II.

This manner of coding has properties with consequences for transaction costs. It is impossible, for instance, to jump from job #1 to job #3 without having job #2 in between. In addition, there can be no transition from job #3 to job #2, as the job index can only increase. This approach implies that transaction costs between non-neighboring job statuses are prohibitively high, therefore no such substitutions will be used during the distance calculations. Consequently, sequence transformation acquires a meaning, namely a transition between subsequent jobs (or statuses in general), which at least partially must answer one of the OMA critiques mentioned previously. In general, this manner of sequence coding substantially contributes to the stability of the final cluster solutions.

After obtaining the distance measures, sequences are subjected to a cluster analysis using the Ward method, following Anyadike-Danes & McVicar (2010). We have used a combination of SAS/IML Studio v3.2 and R v2.10 with TraMineR module (Gabadinho, Ritschard, Studer, & Muller, 2009) for the OMA analysis.

2.3.2 Outcomes and covariates

Aside from looking at the basic sequences and their clusters, we consider family structure sequences (including having children and marital status), part/full time sequences (also see Appendix II) and an index of voluntariness of transitions in a career. We view these as auxiliary information, where their goal is to provide additional information for cluster interpretation.

Family indicators: we use the number of marriages and divorces as indicators of marital stability, as well as the number of children to describe the family situation. In addition, we create another cluster descriptor by constructing a sequence of family states, once again the timing of which is synchronized with the main career sequence. Family states (codes) consist of three digits. The first digit signifies marital status, 0 for being single (also divorced or widowed) and 1 for being married. Two remaining digits denote the number of children the respondent has at specific point of his/her career. For example, code 203 means having a partner and three children.

Part/full time regime: clusters are described by sequences of part/full-time work statuses, corresponding with the timing of main career sequence described above. In fact, this is an alternative encoding of work statuses for the same career timeline, whereby instead of being sequentially numbered, employment periods are encoded per working regime. The non-working part of the career sequence (inactivity, unemployment, retirement) remains identical to main career sequences.

Transition voluntariness: finally, career sequences are characterized by the frequency distribution of an index that describes voluntariness of inter-state transitions. The index is constructed by counting voluntary transitions per respondent, and then dividing that number by the total number of transitions of that respondent.

The transitions are classified as follows:

Table 2: the classification of career transitions used for construction of the voluntariness index

Voluntary transitions	The respondent resigned from a job
	• The employment was terminated by mutual agreement
Involuntary transitions	The respondent was laid off
	• The plant or office was closed down
Ambivalent transitions ⁴	Completion of a temporary job

Using this index, we intend to avoid the unidimensional conceptualization of the career, based strictly on inter-organizational mobility. Given the theoretical value of individual subjective interpretations of

⁴ This transition type can refer to real events both of voluntary and involuntary nature. It is not possible to derive the exact character of these transitions from the data. There is no additional information on the eventual respondent's inclination to prolong the contract; therefore, the transition can be interpreted both ways. We chose for the ambivalent transitions to contribute only 0.5 to the index, assuming this to be an expected value of such transitions, approached when the number of cases is sufficient. This problem of ambiguity might render the voluntariness index a less precise measure, if the expected value assumption fails. Nevertheless, it remains a useful instrument in describing the nature of a career, making a distinction between self-driven and "ad hoc" career implementation.

career, we are thus able to compensate (at least partially) for the absence of other, more specific indicators thereof. Transitions into retirement are excluded from the index, as these involve a different logic of voluntariness.

Career outcomes: there are two career outcome measures in the context of this analysis. The first one entails the quality of work and career in general. The following statements are used to describe subjective career success:

- "I had a disappointing job career"
- "Considering all my efforts, I am satisfied with my work achievement"
- "People close to me said I sacrificed too much for my job."
- "My health has suffered from my job."

Second, the data also contain information on wages during one's main job. We chose to include the respective variable in the analysis, although it does contain many missings: 59% of all cases. Results pertaining to this variable should be interpreted with caution.

Health indicators: these variables express the current state of physical and mental health at time of the survey. Variables pertaining to physical health are: self-perceived health, whether the respondent has a long-term illness and whether health condition limits the amount of paid work one can do. Indicators of the mental condition concern having the feeling of sadness and depression, as well as having hopes for the future. Health at a single point of time—even late in life—is not a career outcome in the strict sense, as many factors contribute to its state. We employ these indicators as proxy to the health condition close to retirement, aiming to add nuances to differences in retirement age.

Other variables: family-related indicators present in visual analysis also expressed quantitatively, namely the number of children and number of marriages (as an indicator of marriage stability). Educational level is measured in years of full-time education enjoyed. The length of active career is the sum of all time periods (with a minimum of a year), in which the respondent was employed. Age and retirement age (available only for the respondents already retired) are self-explanatory, as is house ownership.

Please note that the coding schemes for the relevant variables can be found in the Appendix IV.

3 Results^⁵

3.1 Career typologies

The first step in the analysis consists of the OMA-analysis of career trajectories. As indicated before, we performed the analysis separate for men and women. This is the only way to make their divergent career pathways visible. After the presentation of the clusters, we expand on its content by relating the clusters to background variables like family structure, voluntariness and part-time or full time work patterns.

3.1.1 Men

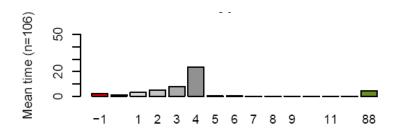
3.1.1.1 Identifying the cluster solution

As we have coded the career sequences with focus on the succession of jobs (reflected in an increasing job index) and, as consequence, transitions within that succession, the results of OMA with subsequent clustering reflect this choice. Considering several cluster solutions (with 5 to 8 sequence categories) we could conclude, that the 7-cluster solution gives an optimal description of the underlying career taxonomy. The 8-cluster solution yields two similar clusters with minor variation in status duration, in essence representing the same career type, whereas the transition from 6 to 7 clusters yields a new distinctive pattern. Career types can be divided in three categories, which can be roughly described as:

 The Stepping stone career, where a person transitions through several jobs before arriving at the "main" (dominant in terms of dedicated time) job, which he or she holds until retirement. Here is a typical pattern of a *stepping stone* career:

⁵ Most of the graphs in this paper use color differentiation for work statuses. The corresponding viewing regimes are advised for higher fidelity, although the same information can be relayed with shades of gray.

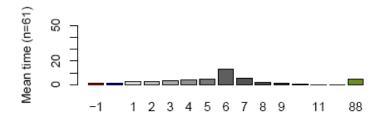
Figure 2: Mean time (in years) spent in nth job⁶. (Men, cluster #2)



The dominant job position in the sequence varies, thus forming several variations on the main pattern. Clusters 1, 4, 5, 2 and 3 correspond to the *stepping stone* type with the dominant job being respectively the 1^{st} , 2^{nd} , 3^{rd} , 4^{th} and 5^{th} in the career sequence⁷.

2) The Hypertransitional career, which begins with the same stepping stone pattern, but does not stop after the main job has been entered. The latter becomes the longest job in the course of a career, but transitions to subsequent jobs continue. The following figure reflects the pattern:





The choice to label this career type as "hypertransitional" instead of simply "transitional" aims to distinguish this specific job mobility pattern from transitions in the *stepping stone* group. The 6th job in the sequence is dominant on the average for the respondents of this cluster.

Status codes (also see the introduction on p.15):

 ^{1:} inactivity

^{0 (}not rendered): unemployment

^{1-12:} job number in the career sequence

^{7 88:} retirement

Strictly speaking, there is no "stepping stone" pattern in cluster 1, as there are no jobs prior to the dominant one. This is then a special case of the general ideal type.

3) The **Intermittent** or "on-and-off" career, which is marked by alternating periods of inactivity and/or unemployment. The following figures render typical career sequences for this type and the distribution of time spent in each state:

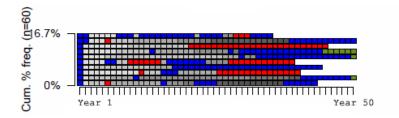
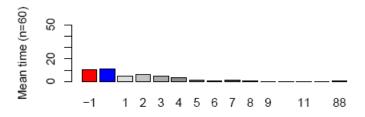


Figure 4: Typical career sequences. (Men, cluster #7)

Figure 5: Mean time (in years) spent in nth job. (Men, cluster #7)



The first career category (the *stepping stone* career) is without doubt the dominant career pattern in the all-male subsample, the two latter categories together accounting only for 9.7% of career sequences.

The following graphs depict the distribution of work statuses of male subsample per cluster in time, starting with their first career year, and spanning 50 years on the career timeline⁸. Figure 6 describes the *stepping stone* group of clusters, whereby the graphs are arranged in respect to the position of the dominant job in the career sequence. Thus, the upper left graph reflects the career pattern in which very first labor market position is retained until retirement. The upper right graph represents the cluster, where the respondent leaves the first job after a few years for another, which is then retained until retirement. Subsequent graphs describe patterns, where the dominant labor market position is retained until retirement) in the career sequences is established respectively in job number 3, 4 and 5.

In other words, career sequences are independent from the calendar time.

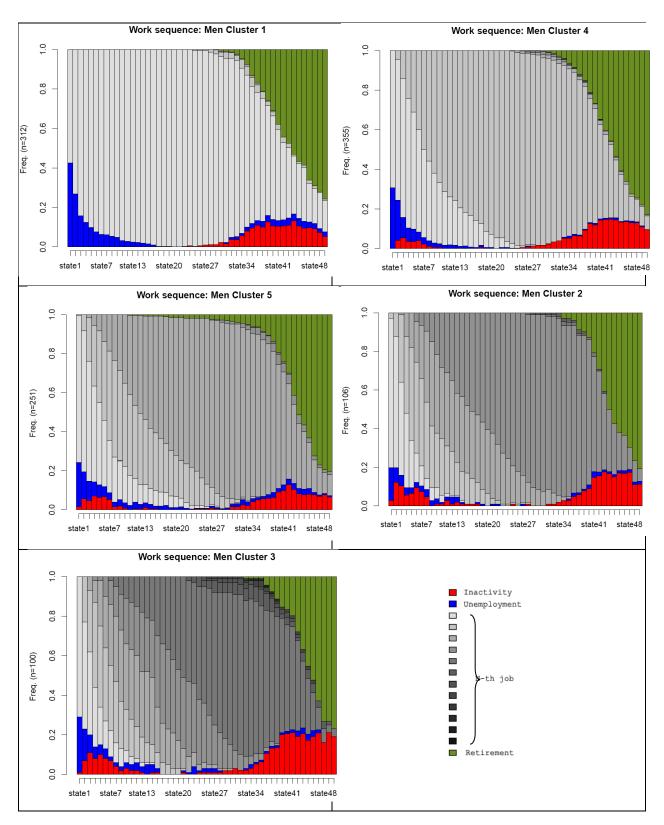


Figure 6: work status distribution for "stepping stone" career variations (men).

Each of the above clusters is characterized by a "warming up" period in the first few career years, where a proportion of respondents in that cluster (about 30%) remain either unemployed or inactive

on the labor market. The *Stepping Stone 1* cluster, reflecting the archetypical traditional career has a unique property of having no inactive respondents during the mentioned period, at the cost of higher proportion of the unemployed (exceeding 40%), than in other clusters of that group. Put simply, this group tends to wait longer for the right job, but once found, it remains their job for life. In general, however, most of the respondents find their first job right after leaving full time education.

The shape of the working career portion is nearly identical for all clusters in the *Stepping Stone* group, when considered as whole, i.e. without distinguishing between the number of the initial steps leading towards the dominant job. A noteworthy exception is the end-career portion of last cluster in the group (*Stepping stone 5*), where job transitions after the dominant labor market position are more characteristic, than in other clusters of the group.

Overall, the whole group of clusters exhibits substantial similarities in regard to career initiation, midcareer (with the exception of the number of "stepping stones") and retirement patterns. Considering these similarities, we can hypothesize that the *Stepping stone* clusters in fact represent a single career logic, which pertains to the theoretical account of the traditional career (Arthur, 1994; Arthur, et al., 1989). Later in the report, we reflect on this hypothesis, comparing various work and non-work indicators within the *Stepping stone* group in order to determine whether the initial number of the steps towards the dominant job (the only major difference between the clusters) produces any effects that would warrant further differentiation within the *Stepping stone* group. For instance, the alternative hypothesis may be that cluster *Stepping stone 5* has in fact more commonalities with the *Hypertransitional* career type (which will be discussed shortly).

An alternative hypothesis for the male career taxonomy (being the most plausible, as the upcoming analysis will reveal) is that there exists a non-discrete palette of career patterns, ranging from the ideal-typical traditional career (single job for life) on one hand, to the *hypertransitional* career (where there is only a hint of prominence of one of the job positions) on the other. Although both extremes of this continuum represent clearly distinctive (and even theoretically opposing (Arthur & Rousseau, 1996)) career patterns, the transition from one to another is gradual. The *Intermittent* career pattern is standing outside the mentioned continuum, and in this sense signifies a break with the rest of the clusters. In the subsequent text we will label this continuum as "SS-HT continuum", ranging from the *stepping stone* to *hypertransitional* pattern.

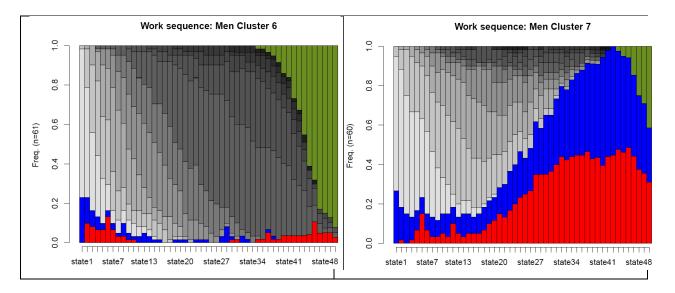


Figure 7: Work status distribution hypertransitional (left) and intermittent (right) career variations (men).

The *Hypertransitional* cluster is different from its counterparts the *Stepping stone* in two respects. First, we have already mentioned that respondents in this cluster tend to continue job transitions after the dominant job; this is clearly visible on the distribution graph above. The period of post-dominant job transitions is much more prominent than in cluster *Stepping stone 5*, where it has just began to emerge. Second, the peak of pre-pension labor market inactivity, which is present in the rest of the clusters starting around the 30th career year, is virtually non-present here. A juxtaposition of both peculiarities suggests that the mentioned period of inactivity prior to retirement is substituted in this cluster by additional "stepping out" job transitions occurring after the dominant job. Theoretically, this coincides with the logic of the *new career*, whereby career (meta-)skills (see e.g. Defillippi & Arthur, 1994; Eby, et al., 2003) acquired in previous transitions might support subsequent job mobility.

The *Intermittent* cluster is characterized by higher levels of both unemployment and labor market inactivity, which begin to rise after about 15 years into the career. The number of career transitions in this cluster remains high. The pattern of transitionality has a clearly different form in comparison with the clusters of SS-HT continuum, which provides additional support for the break between the latter and the *Intermittent* cluster.

To complete the description of clusters for the male subsample, the following table renders respective cluster sizes:

Table 3: Cluster sizes (men)

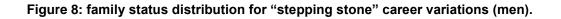
Career type	Cluster	Ν	%
Stepping stone career	Cluster 1	312	25%
	Cluster 4	355	29%
-	Cluster 5	251	20%
-	Cluster 2	106	9%
-	Cluster 3	100	8%
Hypertransitional career	Cluster 6	61	5%
Intermittent career	Cluster 7	60	5%
Total		1245	100%

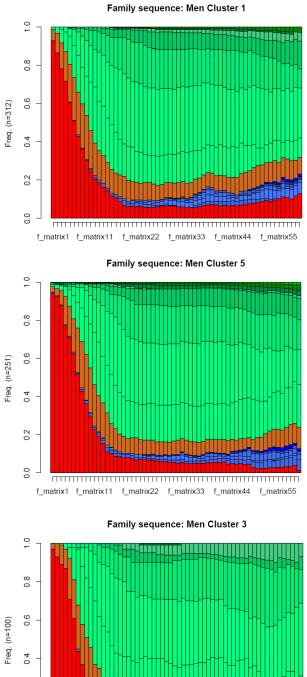
3.1.1.2 Reviewing covariates

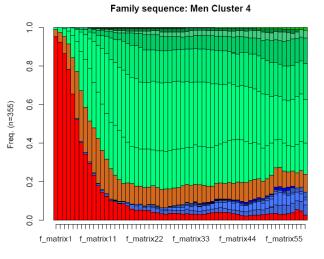
In this section we will take a closer look at the distribution of the clusters according to some covariates. This will enable us to get a clearer picture of the interrelatedness of the career trajectories with other life domains.

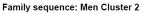
A. Family structure

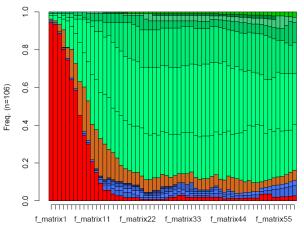
We start with the family structure of the cluster inhabitants, namely their marital status and children. First, we arrange the *stepping stone* career in respect to the sequential number of the main job (first job is dominant for the first graph, then second and so forth). Figure 8 gives a graphical representation of the five *stepping stone* clusters. The sequence should be read left to right:

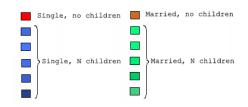


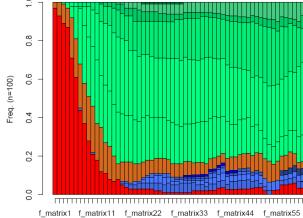










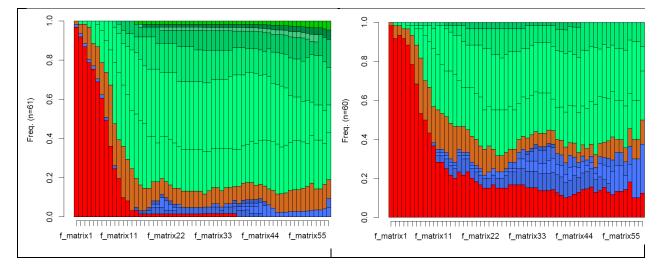


Each graph represents a career timeline, on which the frequency distribution of family statuses is rendered⁹. The lowest bottom portion of the graph represents the share of unpartnered respondents without children. This is where some minor differences between the clusters occur. The unpartnered proportion rapidly declines in the beginning of career, curving into a more or less horizontal line around the 15th career year for all career types.

Minor differences in the unpartnered (single, divorced, widowed or not cohabitating) category can be observed, where its proportion is the largest in the *Stepping stone 1* cluster, and declines somewhat as the initial transitional period gets longer – the contrast between the first and the two last clusters in the group is well pronounced. Aside from that, the clusters look similar in other respects, namely in regard to transitions in partnership and parenthood. We will be able to verify this considering numeric indicators later on in the analysis.

The family sequences for the *hypertransitional* career pattern closely resembles the *stepping stone* group, but the *intermittent* cluster stands distinctively apart from both previous types:





The *hypertransitional* cluster displays the virtual absence of unpartnered respondents after the initial downward slope that all clusters share. If we place the *hypertransitional* graph in the sequence of the "stepping-stone" clusters, it would certainly fit the general trend of the increasing emphasis on family. This is the second supporting evidence of the non-discrete continuum hypothesis, namely that the

 $[\]tilde{\mathbf{M}}_{10}^{\mathsf{M}}$ Meaning that career sequences are synchronized with family sequences.

see the previous table for the legend

classic traditional career and the *hypertransitional* pattern are the extremes of a single continuous range.

On the other hand, the *intermittent* career cluster has a distribution of family statuses that differs drastically from the rest of the patterns. The share of unpartnered individuals is substantially larger, both with and without children. The share of the mainstream family situation (partnered and having children), that dominates other clusters after an initial take-off period, accounts for a lesser portion of the cluster. It is also apparent, that the number of children per family in this cluster is substantially smaller in comparison with the rest. This observation will be confirmed in the course of quantitative analysis later on. It must be noted that it remains the dominant family status, speaking in relative terms. The reader should keep in mind that both last clusters are small in size (see the cluster size table above in table 3).

B. Voluntariness

The following figure summarizes the findings in regard to the voluntariness of transitions, comparing means per cluster. Both individual clusters and the typological groups are presented:

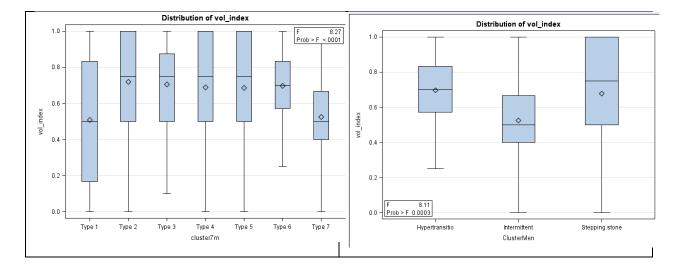


Figure 10: means for transition voluntariness index, ungrouped (left) and grouped (right) clusters for men.

We must consider that most respondents in the *Stepping stone 1* cluster (on the very left) have not experienced any transitions, except the one towards retirement – which is not counted. This might

explain the lower value of the index: the traditional career (which this cluster clearly typifies) presupposes loyalty to a single organization; therefore external job mobility is generally not desirable.

The voluntariness index distribution for the *hypertransitional* cluster is in the same line with clusters *stepping stone 2 to 5,* thus providing additional evidence for the continuousness of the SS-HT continuum.

C. Part- and full-time work

With regard to working regimes, the clusters do not show any substantial differences. Part-time work is virtually absent from men's careers, even for clusters with heightened career transitionality. See Appendix II for the respective graphs.

3.1.2 Women

Also for women we present our results in two steps. First, we give a general overview of the clusters among women's career trajectories. Next, we relate these clusters to some covariates in order to gain more insight in the trajectories being clustered.

3.1.2.1 Identifying cluster solution

The optimal cluster solution for women is comprised of 7 career types, just as it is the case for men. The categorization of the clusters produces nevertheless a different gestalt for women, as we could expect from the literature. Five groups of clusters (career types) can be discerned:

- the stepping stone career pattern is characteristic for women, as was the case for men. In contrast with men, this type is nevertheless less pronounced in terms of relative size in the overall typology, as well as the number of clusters belonging to it. There are only three stepping stone career types, with the dominant job taking positions 1 to 3. For men, this group was comprised of five clusters, with the dominant job position ranging from 1 to 5.
- 2) the hypertransitional career type can be discerned for women as well. It is characterized by the 4th sequential job being dominant on the average in duration in the career course. Interjob transitions continue after the dominant job.

3) the *housewife/inactive career* is a type not present in the male typology. It is marked by an initial period of labor market activity immediately after leaving the educational system, switching later in the course of career to either complete inactivity or a combination of inactivity with working arrangements biased towards part-time regimes. This group contains a single cluster.



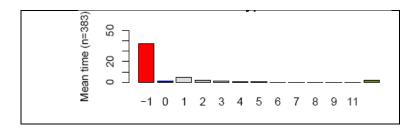
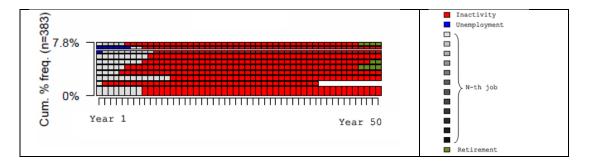


Figure 12: Typical career sequences (women, cluster 1 – housewife/inactive)



4) Mixed (work-inactivity) cluster is also characterized by a period of labor market activity followed by inactivity for the rest of career (the ordered character of which distinguishes it from the *intermittent* pattern in men's taxonomy). Nevertheless, the significantly prolonged period of the initial employment, and a different rate of transition into inactivity warrant dedicating a separate career category to the latter cluster in the overall taxonomy. The graphs below provide an initial illustration in this regard:

Figure 13: Mean time (in years) spent in nth job. (Women, cluster 4 – mixed (work-inactivity))

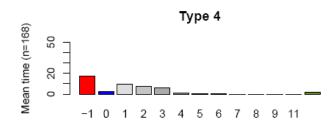
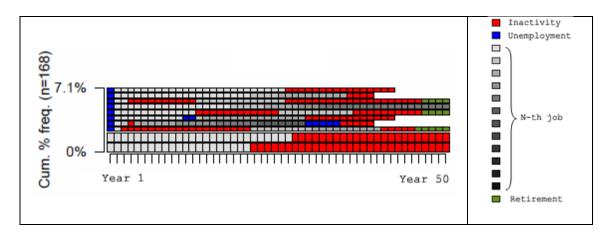


Figure 14: Typical career sequences (women, cluster 4 – mixed (work-inactivity))



5) the housewife/unemployment career is characterized by a large proportion (more than 65%) of its members transitioning into unemployment shortly after the beginning of their careers. This proportion starts to decline after some 15 years into a career, being replaced to a slight degree by increasing labor market activity. About 10 years later, however, growing labor market inactivity and subsequent retirement reverse that trend (see the distribution graphs below).

The following figures render the distribution of work statuses in their respective clusters:

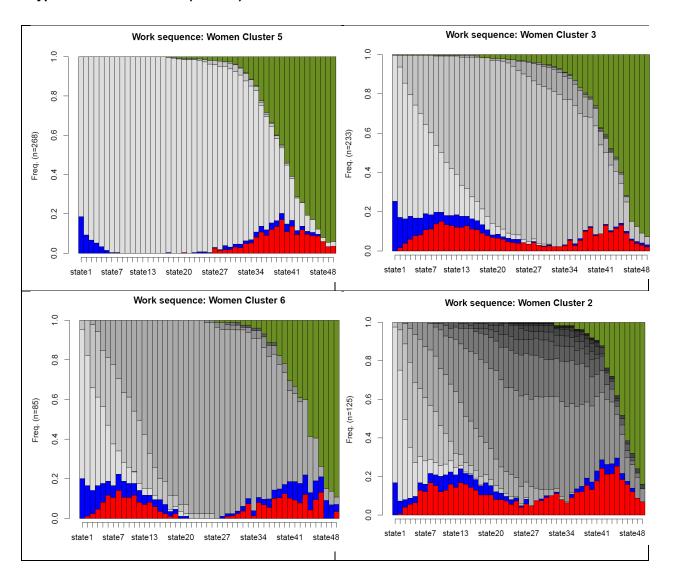
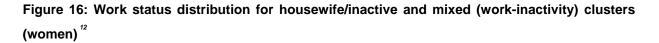


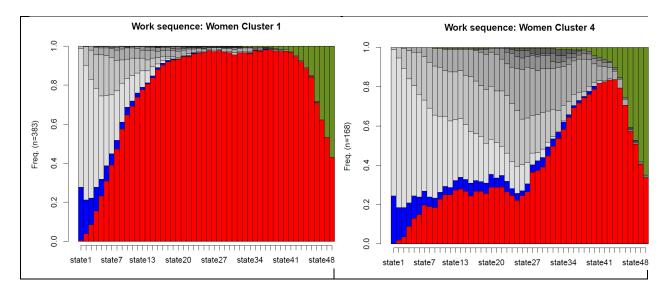
Figure 15: Work status distribution for "stepping stone" career variations and the hypertransitional cluster (women)¹¹

The difference with men's *stepping stone* pattern is in the much shorter number of steps to arrive at the state of career hypertransitionality. This means that the pattern with successive transitions after the dominant employment positions has been reached. Interestingly, the *stepping stone 1* cluster for women contains no labor market inactivity in the initial career phase, just like its counterpart for men. In all other clusters this period is present.

11

See Figure 17 for the legend

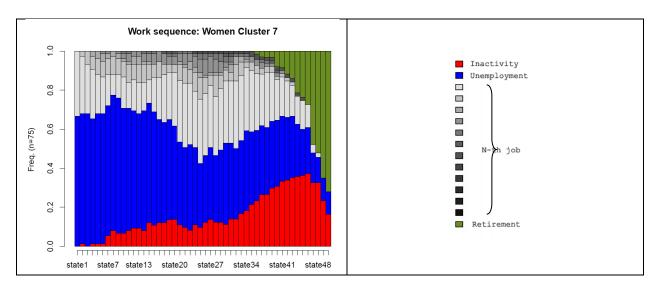


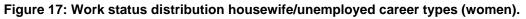


The difference between the *housewife/inactive* and *mixed* (*work-inactivity*) groups becomes fully apparent in the figure above. The cluster on the right features a much larger share of respondents at work. In addition, the slope of transition from work to non-work is less steep, implying that women in this cluster stay longer on the labor market. In addition, there is a short period of labor market activation in the *mixed* (*work-inactivity*) cluster around the 25th career year, probably coinciding with the end of childcare period. Both clusters feature a less pronounced portion of the retirement status, in comparison with the *stepping stone* and *hypertransitional* groups.

¹² See Figure 17 for the legend

Finally, the housewife/unemployed cluster, the smallest of all seven (N = 52):





In the *housewife/unemployed* cluster most of the respondents are either unemployed or inactive. About 30% find a job, most of them stay in it until retirement, while a smaller group experiences some additional job transitions. The same short period of labor market activation is present around the 25th career year, as in the previously discussed cluster. The respondents are distributed across groups and their respective clusters as follows:

Table 4:	Cluster	sizes	(women)
----------	---------	-------	---------

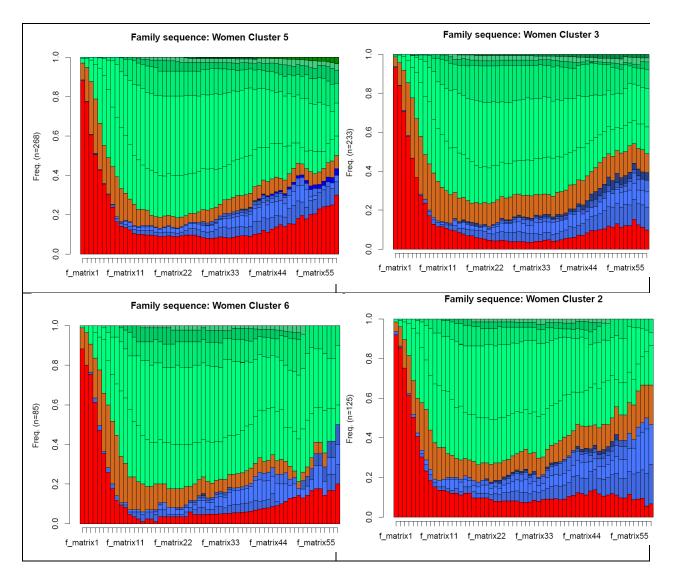
Career type	Cluster	Ν	%
Stepping stone career	Cluster 5	268	20%
	Cluster 3	233	17%
	Cluster 6	85	6%
Hypertransitional career	Cluster 2	125	9%
Housewife/inactive	Cluster 1	383	29%
Mixed (work-inactivity)	Cluster 4	168	13%
Housewife/unemployed	Cluster 7	75	6%
Total		1337	100%

3.1.2.2 Reviewing covariates

A. Family structure

The following graphs represent familial sequences for women:

Figure 18: Family status distribution for "stepping stone" and "hypertransitional" (bottom-right) career variations (women)¹³



13

See Figure 20 for the legend.

Figure 19: Family status distribution for housewife/inactive and mixed (work-inactivity) clusters (women)¹⁴

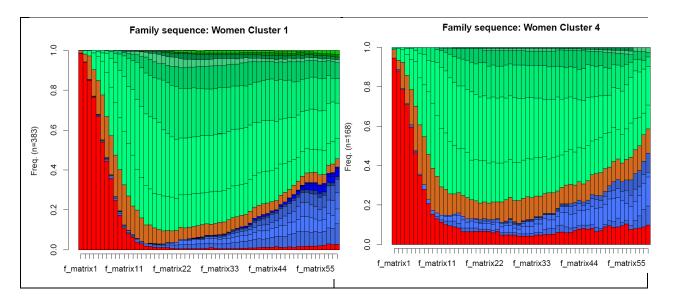
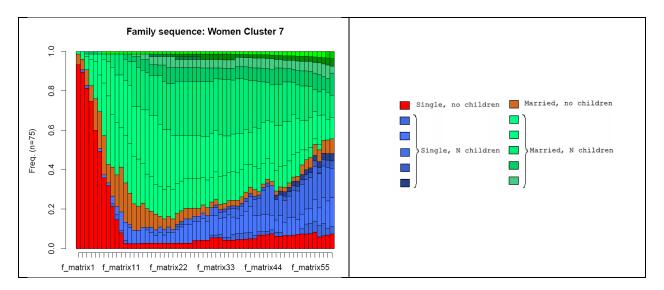


Figure 20: Work status distribution housewife/unemployed career types (women).



Family structures of the respective clusters for women reveal little differences, except the group of unpartnered women with children, which has visible variations towards career end. This trend is especially prominent in the *housewives/inactive* group. We can note that the proportion of unpartnered women is substantially larger towards career end, when compared with men (this regardless of having children).

14

See Figure 20 for the legend.

B. Voluntariness

Finally, the following graphs conclude this section by rendering the distributions of the voluntariness index for all clusters:

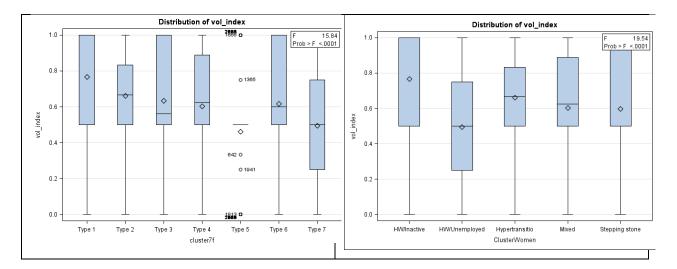


Figure 21: voluntariness index means comparison for clusters and cluster groupings (ANOVA, women).

Similarly to men's cluster we find a difference in voluntariness of the transition between the *stepping stone 1* cluster and the rest of the group. This is confirmed in subsequent quantitative analyses. Again, this might be attributed to the fact, that most of the respondents belonging to this cluster do not have any transitions other than retirement, and thus register as missings.

C. Part- and full-time work

With the exception of the *stepping stone 1* cluster for women, where the share of part-time workers amounts to a maximum of $10\%^{15}$, other clusters reveal little differences, featuring about 20% of part-time workers. The corresponding graphs can be found in the Appendix II.

3.2 Inter-cluster differences

The first step in our study was the OMA-clustering of career patterns. We explored the clusters by relating them to some background variables. In this paragraph, we go one step further. Given the

¹⁵ Including employees who have shifted from part- to full-time regime and vice versa.

clusters, we now look at some outcome variables. We use ANOVA-analyses to compare the values of these outcome variables between the clusters to find out where different trajectories lead to different views of respondents on the career in terms of e.g. career satisfaction.

3.2.1 Men

The following table represents differences between male clusters in terms of their means (one-way ANOVA). Clusters are grouped into categories discussed above. The ungrouped model can be found in the Appendix I, although the grouped solution is more preferable due to the considerations of parsimony and similar (even better for most items) capture of between-group differences.

	Stepping stone	Hypertransitional	Intermittent	P > F
Retirement age	59.63	60.40	64.29	0.0025
Voluntariness index	0.68	0.70	0.52	0.0003
Age	68.26	71.46	65.03	0.0016
Career satisfaction	1.63	1.48	2.21	<.0001
Career disappoint.	3.02	2.91	2.35	<.0001
Achievement satisf.	1.71	1.60	2.13	<.0001
Sacrificed too much	2.74	2.71	2.93	0.2288
Health suffered	2.92	2.77	2.49	0.0014
# marriages	1.05	1.18	1.12	0.0433
# divorces	0.16	0.25	0.42	<.0001
# children	2.41	2.45	1.98	0.0705
Wage main job ¹⁶ EUR	1813	1667		0.5888
Home owner	1.20	1.33	1.55	<.0001
Active career years	38.38	40.48	23.81	<.0001
Years FT education	12.48	11.64	10.09	<.0001
Health general	2.89	2.91	3.15	0.1742

Table 5: Comparison of means for grouped clusters (ANOVA) for men.

¹⁶ Income for self-employed.

Long-term illness	1.63	1.57	1.43	0.0173
Health limits work	1.82	1.81	1.57	<.0001
Depression, sadness	1.74	1.78	1.63	0.2029
Hopes for future	1.10	1.15	1.20	0.0969

Retirement age is significantly higher in the *intermittent* group, whereby the difference between the *stepping stone* and *hypertransitional* groups is not as pronounced. In general, we notice that indicators for the *intermittent* group stand out, while those for the remaining two groups are in proximity to each other. This is the third empirical indication that *hypertransitional* and *stepping stone* 1 clusters are the extremes of a continuous range, while the *intermittent* cluster stands clearly apart.

We must consider that OMA is sensitive to sequence length: average age in each cluster differs significantly. In addition, the *intermittent* cluster contains only 14 retired respondents, 76% of this cluster have been not yet retired at the time of the survey. This percentage is much lower in the other two groups, 36.5% for the *stepping stone* and 19.7% for the *hypertransitional* groups. Therefore, differences in retirement age should be interpreted with caution, when considering the *intermittent* cluster.

The following table shows the distribution of age cohorts between career types for men:

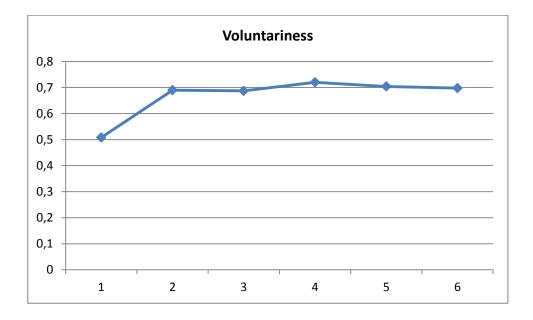
	59 or younger	60-69	70-79	80 or older	TOTAL
Hypertransitional	1,8%	5,0%	7,5%	5,9%	4,9%
Intermittent	6,0%	6,2%	3,1%	2,4%	4,8%
Stepping stone	92,2%	88,9%	89,3%	91,8%	90,3%
Ν	334	422	319	170	1245

Table 6: Distribution of age cohorts per career type, men

We need to consider that career types with relatively younger individuals might carry a bias, as they are represented by early retirees on the average, in comparison with career types with older employees, where atypically early retirements have been outbalanced by those who stay longer in employment. This could be the case for men, where the *hypertransitional* group is slightly older than the *stepping stone* group, and partially explain the inter-group differences in regard to retirement age.

Consistent with our previous research (Kovalenko & Mortelmans, 2010), the measure of **transition voluntariness** is the highest in the *hypertransitional*, and the lowest in the *intermittent group*, potentially an expression of the theoretically predicted distinction between positive and negative

variants of transitionality. Again, the *stepping stone* group scores just slightly lower than its hypertransitional counterpart, essentially due to the low value in the *stepping stone 1* cluster, which we have discussed previously¹⁷. If we look at the full cluster solution, we notice that voluntariness scores for *stepping stone* (2 through 5) and the *hypertransitional* clusters are in line, with a very slight peak in the middle. This indicates that labor market transitionality in the SS-HT continuum is predominantly voluntary:





Subjective career satisfaction, interestingly enough, is the highest with the *hypertransitional* group (lower scores indicate higher satisfaction). It is followed by the *stepping stone* group with the difference of 9% (not entirely negligible for this variable). The least satisfactory career is reported by the respondents in the *intermittent* cluster. Satisfaction with career achievements follows the same pattern.

Scores for having a **major disappointment** in the course of career reveal additional details: the *intermittent* cluster is still the leader in the negative sense, but the remaining two groups switch positions, *the hypertransitional* pattern being in the middle, and *the stepping stone* career having least disappointments on the average. This can indicate that while *hypertransitional* careers yield most

¹⁷ This is one of the few variables, where the grouped model is disadvantaged, as indicated by a slight decrease of the F-test score. The low score for the first cluster is likely to be biased since most of the respondents in this cluster have not experienced transitions other than retirement.

satisfaction, the road to subjective career success may be covered with thorns, due to higher volatility and thus unpredictability of the career trajectory.

Marital instability is the lowest in the *stepping stone* group, and the highest in the *intermittent* cluster, *hypertransitional* career being in between. With this finding we can confirm the hypothesis that men pay a price for following non-traditional career patterns. Rendering further support to this statement, the number of children in the *intermittent* group is substantially lower, although the difference yields a borderline statistical significance. The exact mechanism of disadvantageous effects of non-traditional career patterns for men is not entirely clear. Previous research suggests that alternative male career paths tend to result in lower wages (Cheramie, et al., 2007), which can be explained by foregoing benefits associated with tenure as well as consequences of inevitable job instability associated with these career types. Negative familial consequences might be in part related to these financial issues. An additional set of factors can be related to the gendered normative career expectations and their reference to perceived career success. In other words, alternative career paths in the era of the traditional career are on average regarded as being less successful, simply due to the socially prevalent definition of career success as stable upward mobility with a strong emphasis on extrinsic material rewards. The followers of the hypertransitional path remarry most often, in comparison to the other two types.

Unsurprisingly, the sum of **active career years** is much lower in the *intermittent* group, than in both its counterparts. Careers are on average the longest in the hypertransitional pattern.

The amount of education expressed in full-time **school years** is the highest for the followers of the *stepping stone* group, contrary to the research on the *new career* (Briscoe, et al., 2006; Gerber, et al., 2009; Marler, et al., 2002; Segers, et al., 2008). This might reflect the situation preceding the shift of educational balance between the traditional and post-organizational career groups, and not simply be an empirical contradiction. In other words, men with higher education were more likely to pursue a traditional career in the second half of the XX century, while their millennial counterparts have a clear preference for the *new career*.

Finally, we find some relationship with **health** measured at the moment of the survey. It is not entirely clear whether respondents had health problems already in the course of their career. We notice that members of the *intermittent* cluster suffer more from long-term illness and health problems that limit work. It is quite plausible that health at their active age has influenced both their career pattern as well as the state of heath in the survey year. We should keep in mind, that the size of the *intermittent* group is the smallest of all three.

3.2.2 Women

For women we will use the grouped model as well, for reasons of parsimony. The ungrouped version can be found in the Appendix I.

	HW/	HW/	Hyper-	Mixed	Stepping	P > F
	Inactive	Unemployed	transitional		stone	
Retirement age	63.77	61.47	61.25	62.55	57.48	<.0001
Voluntariness index	0.77	0.50	0.66	0.60	0.60	<.0001
Age	71.31	68.51	63.70	66.70	65.01	<.0001
Career satisfaction	2.08	2.21	1.87	1.85	1.64	<.0001
Career disappoint.	3.00	2.77	2.63	3.00	2.98	0.0132
Achievement satisf.	1.92	2.09	1.90	1.82	1.73	<.0001
Sacrificed too much	3.08	3.02	2.73	2.82	2.78	<.0001
Health suffered	3.21	2.80	2.65	2.84	2.84	<.0001
# marriages	1.09	1.05	1.14	1.10	1.04	0.0545
# divorces	0.14	0.29	0.37	0.20	0.20	<.0001
# children	2.76	2.84	1.98	2.31	2.18	<.0001
Wage main job ¹⁸ EUR	249	626	1492	786	1279	<.0001
Home owner	1.29	1.29	1.31 1.27		1.17	<.0001
Active career years	8.10	15.65	35.42	24.46	35.27	<.0001
Years FT education	10.58	10.28	11.83	10.94	12.89	<.0001
Health general	3.13	3.10	2.87	2.96	2.84	0.0016
Long-term illness	1.57	1.51	1.54	1.52	1.61	0.2870
Health limits work	1.79	1.75	1.87	1.71	1.78	0.0442
Depression, sadness	1.57	1.39	1.50	1.58	1.59	0.0351
Hopes for future	1.14	1.15	1.13	1.10	1.11	0.7238

Table 7: Comparison of means for grouped clusters (ANOVA) for women

Overall, we can conclude that career taxonomy composition for women differs drastically from that of men. The *stepping stone* career type is attributable to only 43% of the respondents in the female subsample, while for men its share amounts to 90%. Women have several unique career types, likely

¹⁸ Income for self-employed.

to be related to changes in family roles if the timing of transitions to and from labor market is any indication. In addition, the *intermittent* career type from the male typology is not present here¹⁹.

Retirement age for women is the lowest in the *stepping stone* group, consistent with the findings for men. The *Inactive* cluster, on the other hand scores the highest on this variable, potentially due to the lesser degree of accumulation of the pension rights.

The table below renders the distribution of age cohorts between career types for women:

	59 or younger	60-69	70-79	80 or older	TOTAL
HW/Inactive	14,7%	27,5%	40,1%	46,5%	28,6%
HW/Unemployed	4,2%	5,5%	6,6%	7,6%	5,6%
Hypertransitional	12,3%	10,9%	5,6%	4,7%	9,3%
Mixed	13,3%	13,4%	10,5%	12,4%	12,6%
Stepping stone	55,6%	42,7%	37,2%	28,8%	43,8%
Ν	430	433	304	170	1337

Table 8: Distribution of age cohorts per career type, women

As the *stepping stone* group is older than *hypertransitional* for women, the logic bias in regard to early retirees, which we have mentioned for men, is not applicable here.

The *inactive* cluster has the highest value of the **voluntariness index** for both men and women. Resigning from an active career is a choice for most of these women. Those struggling with unemployment, on the other hand, tend to experience less control over the course of their career.

Career satisfaction indices paint a picture different from that of men. If for them the *hypertransitional* pattern yielded the highest degree of subjective satisfaction with their career, for women it is the *stepping stone* path. Hypertransitional and mixed careers have medium scores, followed by inactive and unemployed types. An effect similar to that found with men can be noticed in regard to having **major disappointments** in the course of a career. Hypertransitional female workers score the highest of all groups on this indicator, and also believe they have sacrificed too much for their careers. This

¹⁹ A possible explanation could be that labor market inactivity is much easier accepted in women, therefore there are less internal and external motivators to continue attempts at work in an unaccommodating context (such as chronic illness or unemployment). While women do not violate normative gender expectations resigning from the labor market, men can experience relatively higher social pressure (possibly internalized) to continue pursuits of gainful activity even in the event of repeated failure. It will become apparent from the subsequent analysis that no apparent continuum of career pattern emerges for women, as it was the case for men.

finding is the second indication of the idea that *hypertransitional* careers may provide relatively high level of subjective success, which comes nevertheless at a price expressed in more strenuous effort and higher chance of failure. Interestingly, wages in the *hypertransitional* cluster are also higher, although the large number of missings on this particular variable—62.5% across all clusters—might cause a bias.

The *stepping stone* career for women does not have this polarization between positive and negative satisfaction items. It scores both high on positive items and low on the negative ones. This suggests that the traditional career pattern is the most accommodating path in terms of subjective success, even though this raises the question of work-family balance. Family indicators provide some explanation to that account.

Contrary to our hypotheses, the hypertransitional career proves to be the most disadvantageous in regard to **marital stability** (0.37 divorces on average), whereas the *inactive* type enjoys the most stable marriages of all five types (0.14). In addition, the hypertransitional careerists have the least amount of children on average. Of course, there are no indicators of marriage quality in the data, which should attenuate our interpretation of marital stability (perhaps the traditional character of marriage and career are interrelated through the overarching habitus). Nevertheless we must infer that the original hypothesis, describing the transitional careers as more women-friendly in familial terms (Marler, et al., 2002; Valcour & Tolbert, 2003; Woodd, 2000), requires additional investigation. It is possible, for instance, that the difference in historical timings of careers in our research and in the *new career* literature accounts for this inconsistency, parallel with our findings for education. Just as it was the case for men, women with hypertransitional careers remarry most often of all groups.

Unsurprisingly, the average **number of children** is the highest in the *Inactive* and *Unemployed* clusters, as the timing of labor market transitions in these clusters suggests a connection to work-family balance. The *Mixed* cluster stands somewhere in between, both qua marital stability and number of children. The traditional career seems to be less compatible with larger families, and the hypertransitional pattern even more so. Both career types are marked by high engagement with one's career timewise, which can cause work-family balance issues.

Consistent with the findings for men, **educational levels** are the highest in the *stepping stone* group, followed by the *hypertransitional* career types.

In contrast to men, the **subjective health** indicator at the moment of the survey is significantly different between career groups, the *stepping stone* scoring the best in this respect, *inactive* and *unemployed* the worst. A curious finding, as it suggests that having a career, stable or not, leads to

better health later in life. We must keep in mind, however, that these are *subjective* health indicators, and might reflect a bias in perception, and not a real difference. Health related limitations to work are more typical for the *mixed* clusters, although absolute differences between groups are very small in comparison to men. Women in the *unemployed* cluster are more prone to have feelings of depression and sadness late in life, while their counterparts in the *stepping stone* group score the lowest in this regard. This pattern fully corresponds to career satisfaction scores. Although we cannot draw any causal inferences from the analysis, nor make conclusions about (the existence of) mediating variables, certain career types seem to be tied to well-being at old age. Additional research is required.

4 Discussion

4.1 Gender and family

The OM analysis has yielded a meaningful taxonomy on the basis of the coding scheme, which takes transitionality as focus. First of all, it reflects the gendered career patterns as largely consistent with the dominant conception of work (Edgell, 2006), showing a huge discrepancy in variation of career paths between men and women, but also revealing career path nuances within each gender. The details thereof somewhat challenge the depiction of the traditional career as being absolutely dominant, and may provide an insight in the beginnings of the emergence of alternative career paths. Second, the well-pronounced distinctions between career types further corroborate the construct validity of the taxonomy.

Men's careers come very close to what the ideal-typical traditional career model prescribes: a life-long progression of work within one or two organizations (Sullivan, 1999). Most of the men's career patterns in our sample are indeed marked by a stable career stage, which protrudes until retirement. The initial career stages are somewhat more controversial in regard to their correspondence to this ideal type. There is a considerable variety in the number of transitions prior to the stable period, which raises a question as to where exactly is the border between the traditional and transitional (alternative) career. One of the important findings for men is that, in contrast with women, there exists a continuum of career patterns, ranging from strictly traditional to hypertransitional. We found little indication of any internal divisions within that continuum aside from the mentioned amount of initial job transitions, and a drop in their prevalence from a certain point on.

Career patterns for women correspond to the tripartite classification of Clogg, Eliason, & Wahl (1990): stable (full-time) actives, unstable actives, stable inactives. With minor adjustments Hakim (1996) proposes this classification to describe the three career profiles²⁰ of women in terms of employment continuity: the continuous, the homemaker and the *intermittent* careers. The heterogeneity of women's work histories stands in contrast with the men's profile continuum, exhibiting clear breaks in career logic, conform Hakim's own findings.

Two clusters are predominantly family-oriented (the homemaker profile), two combine periods of work and unemployment/inactivity (the *intermittent* profile) and three clusters are career-oriented and exhibit the same properties as men's careers (the continuous profile). Work-family balance variations, enacted through the filter of the gender schema's (Marler & Moen, 2005) have a much larger impact on women's labor market realities, resulting in a larger diversity of career paths. Consequently, we might expect that it is this diversity that will give rise to the multiplicity of alternative career patterns as described by contemporary career literature, or at least to a more varied taxonomy than the more homogenous male career spectrum.

Consistent with our initial hypothesis, the percentage of hypertransitional careers is twice as large among women. Overall, we find support for women's predisposition towards hypertransitional career patterns in the data, although nuanced in regard to individual preferences, as mentioned above.

In accord with our initial expectations, men do carry certain penalties in terms of marital stability and number of children, when they follow alternative, non-traditional career paths. There seems to be a gradation in terms of severity of the cost: men with a hypertransitional career have less stable marriages, but still a similar amount of children in comparison with the traditional career followers; the *intermittent* career pattern has more negative characteristics, scoring the highest on family instability and the lowest on the amount of children²¹. Men in the hypertransitional cluster also remarry more often, than those in the *intermittent* cluster.

The hypothesis in regard to penalties for women pursuing the traditional career pattern is not supported. The hypertransitional career path has a substantially higher divorce rate, even though the remarriage rate is also the highest across all patterns. The same cluster has the lowest number of children. We can therefore conclude that hypertransitional career paths are tied to substantially higher marital instability and for women - to lower number of children. We must remind, of course, that the causality of this relationship is undetermined.

The description pertains to actual career profiles, and not Hakim's preference theory.

It needs to be reminded that the significance level for the differences in the amount of children is slightly above the 0.05 margin for men (see Table 5).

The mismatch between the data and the hypotheses leads to the conclusion that both familial indicators employed here show different logic of interaction with career patterns. First, the premise that hypertransitional careers are friendlier towards family, cannot be corroborated. Second, as we based our hypotheses on the contemporary research, it is possible that the nature of the hypertransitional careers has evolved in the recent decennia.

For men, the *intermittent* pattern is tied to lower income, which can negatively influence the familyrelated indicators. The link between marital instability and the hypertransitional career pattern for men is less clear from the current analysis, though it is consistent with other findings (Valcour & Tolbert, 2003). It is possible that men having no stable job (in correspondence with the socially accepted gender scripts and age norms) are stigmatized, which negatively influences their marriage. A verification of this hypotheses falls outside the scope of this text. Unfortunately, we also cannot fully rely on the wage indications to nuance these findings due to high amount of missings in the data. Higher marriage stability for the women's *stepping stone* group could be explained by higher family income, which is found to be positively related with the former (Cutright, 1971; Galligan & Bahr, 1978).

4.2 Subjective career success

Career satisfaction scores reveal a dynamic that goes contrary to our initial hypotheses. Men are more satisfied within the hypertransitional career framework, than the traditional one, while the opposite should follow from gendered normative expectations linked to the dominant conception of work, as we have outlined in the beginning. This pattern is more apparent, when we consider the ungrouped model (see Appendix I). The satisfaction score rises in the beginning of the SS-HT continuum, sharply drops for the *stepping stone 5* cluster, and reaches its peak in the hypertransitional cluster. This may indicate that people, who take an effort to find the "right" job, are more satisfied with their career, but too much searching is discouraging. On the other hand, hypertransitional careers are not a part of that declining slope, possibly implying that the evaluation of subjective career success is based on other criteria, and transitionality is used as a strategy for a better career. We must keep in mind though, that the number of respondents in this cluster is relatively (although not critically) small, and interpret the results with some caution.

Women, on the contrary, are most satisfied with the traditional (stepping stone) career path, whereas they could have been hypothetically expected to exhibit more predisposition towards higher satisfaction in hypertransitional or mixed patterns, as allowing for more flexibility for combining family and work (Marler, et al., 2002; Valcour & Tolbert, 2003). A plausible explanation is that women, who choose not to have a career or to combine work with family, do not feel they have a successful career since the criteria for such a career are defined socially and are consonant with the traditional ideal type. Less- or non-working women might be equally satisfied with their life in general. An indicator for the latter was not present in the dataset, although its counterpart – depression/sadness score²² was significantly different between clusters. Yet again, the female traditional career followers scored the best on this question, while transitional and mixed careers ranked at the bottom of the distribution.

4.3 Retirement age

In regard to the retirement age, we conclude that followers of the hypertransitional career path retire later than their traditional counterparts. This finding is valid for both men and women. The trend is not a consequence of insufficient pension rights, as the length of career indicator can attest. The number of active career years (without periods of inactivity and/or unemployment) is very close to equal between both types for women, and is higher by more than two years for the hypertransitional career for men. The *intermittent* career pattern for men and family-oriented career patterns for women are characterized by even higher retirement age, but the comparison with the previously mentioned career types is invalidated by factors related to a much shorter average career span. This is an interesting finding policy-wise, provided the increasing proliferation of post-traditional career patterns with increased transitionality in the last decennia (Arthur & Rousseau, 2001; Schmid, 2002). We must, however, stress the preliminary character of this finding—more research is necessary to infer proper causality. Specific factors peculiar to the hypertransitional pattern also remain to be determined.

Three different theoretical vectors can form the explanatory base for the potential relationship between career transitionality and longer career duration. First, the multiplicity of career transitions and the diversification of working arrangements might contribute to the development of career metacompetencies (Defillippi & Arthur, 1994) necessary to deal with stresses and challenges of the preretirement age, including coping strategies for psychological and objective transformations in work at that period. As result, the employer is better equipped to maintain career resilience (London, 1983) and actively co-direct the occurring changes in that period, through reflexive career management. Crudely put, the flexible economy requires individuals to manage their own careers, but the skills to

²²

Operationalized as a dummy referring to having feelings of depression or sadness in the last month.

do so are not taught at schools – they can for the large part be acquired through personal experience, which seem to be more efficiently gained in certain career patterns, and not the others.

Second, certain forms of transitional careers, such as boundaryless and protean career types (Arthur & Rousseau, 2001; Hall, 1996b), are characterized by a specific set of values, attitudes and behavioral strategies—what Mayrhofer *et al* (2004) call *career habitus*—that serve as intrinsic motivators to work in function of individual identity and personal meaning.

Third, transitional careers are characterized by a higher share of transferrable skills, which are not firm-specific (Banai & Harry, 2004; Sullivan, 1999). This additionally can increase the flexibility of older workers, and improve their value as mentors.

4.4 Other covariates

In contrast with the empirical findings of the last decennia (Briscoe, et al., 2006; Cheramie, et al., 2007; Gerber, et al., 2009; Marler, et al., 2002; Segers, et al., 2008), higher educational qualifications are on average higher for the adherents of the traditional career path. This thesis holds for both men and women. This leads to a conclusion that the transformation of career patterns since the second half of the XX century has entailed a rearrangement of career strategy choices for the highly educated strata, whereby their preference shifts from the traditional to alternative patterns.

5 Policy implications

5.1 Gender-related differences

The fact that career patterns of men and women are different, is far from being new. Nevertheless, a few practical implications can be drawn from the transitionality-based career taxonomy for both genders and the corresponding between-group variation.

It is clear, that men and women require differentiated approaches in terms of career support and counseling, both due the diversity of career mobility patterns, and to the different logic of the relationship between the patterns of mobility and career covariates and outcomes. For instance, hypertransitional careers lead to higher satisfaction with men, which is not the case for women, in comparison with the traditional career. Another example is the number of children for the same career type. This implies that even though the observable career patterns may be identical, the underlying dynamic of the interaction between work, family and success is not. Policy makers as well as researches should therefore consider a more careful approach to the identification of career path differences, taken in a broader context of gender, work and family.

Our findings to a certain extent corroborate Hakim's (1996) observation that men have a much more limited number of choices of modes of organizing their careers. This situation stems from the historically and ideologically defined constraints of the dominant conception of work, which seems to have persisted to a large degree into our time. The flexibilizing economy comes, on the other hand, in conflict with the traditional gender schema's, requiring not only new forms of career behavior, but also new ways of career management and conceptualization of work. While women originally exhibit career patterns with heightened transitionality, men could require additional support in making their working lives more flexible (both in terms of physical and psychological boundaries (Briscoe & Hall, 2006)). Simpler put, the remnants of the traditional labor division (both actual and ideological) may impede men much more than women in their adjustment to the shifts in the contemporary career environments. As an illustration, the heightened scores of experiencing a major career disappointment go hand in hand with high scores of career satisfaction for men in hypertransitional career paths. This can indicate the need for coping mechanisms in regard to the stress and uncertainty intrinsic to job-to-job career transitions, which are unlikely to be developed from the context of the traditional career arrangements typical for men.

5.2 Retirement

We have found, that differences in retirement age are related to certain career transitionality patterns. While this finding is lateral in relation to the main thrust of our analysis, it is nevertheless quite interesting in the sense of public policy. Hypertransitional careers are characterized by higher retirement age for both men and women, in comparison to traditional career paths. For men, they also imply more years gainfully spent on the labor market, while for women the length of career is almost identical to that of the traditional career.

If certain career paths can be stimulated and/or supported (e.g. through career counseling), this can be a mechanism leading to certain degree of activation of workers at end-career stage. Factors specific to hypertransitional career paths, which cause career prolongation, need to be identified. The existence of path dependency effects is corroborated in the study by Hayward, Friedman, & Chen (1998), who find the impact of mid-career factors on the retirement process.

5.3 Work-family balance

Hypertransitional careers paths score unfavorably for women in regard to family indicators: marriage stability and the number of children. Although contemporary research provides some indications that alternative (more specifically, boundaryless and protean) career trajectories help balance work and family life (cf. supra), the finding still remains a matter of concern. It can be that country-related factors mediate the effects of career patterns (Segers, et al., 2008), resulting in a better or poorer degree of "match" between the context of the labor market and specific career behaviors. For example, the rather rigid Belgian labor market (De Winne, Stynen, Gilbert, & Sels, 2008) operating in the context of the continental welfare state type, may have specific penalties for alternative careers, that are absent in other economies and social contexts.

Overall, our findings call for specific attention towards the group of women in hypertransitional career paths, especially in regard to supporting work-family balance.

6 Conclusion

We have established that career patterns in themselves are a significant predictor of multiple work and life aspects. Different career types lead (or are tied) to different outcomes in terms of family, subjective career success, retirement age, as well as other variables. There is evidence that career transitionality does not necessarily entail positive effects. Transitional careers definitely differ on the mentioned variables from the traditional career types, whereby positive and negative outcomes are intermixed. In subsequent research we deem feasible to explore mediating factors in this regard.

We have found, that gender continues to be important not only as the predictor of the career path distribution, but also as a mediator for career outcomes. Similar career types can lead to different results for men and women, as we have demonstrated. This calls for gender-specific customization of policy measures in regard to stimulation of certain career types, as well as additional attention towards the interaction between gender-related factors, including the gender schemata (cf. supra), and the unfolding of work histories. Men exhibit a very limited number of career options, and deviations from the normative (read: traditional) career pattern are tied to negative outcomes in terms of family and subjective career success. In general, hypertransitional paths are linked to marriage instability. It would seem that transitionality in career and in marriage go hand in hand, crudely put.

A lateral finding of our analysis is the connection between career types and retirement age. We have outlined several mechanisms, which could contribute to the postponement of retirement in highly transitional career paths. Nevertheless, the current data do not allow us to make more precise conclusions due to the lack of subjective indicators. Subsequent research based on the multidimensional career concept is necessary, with focus on causality.

The link between work-family balance and career types is not as straightforward as the contemporary research suggests. It is possible that careers under study here, as well as the logic of their effects, are typical for the second half of the XX, and that the socio-economic changes of the last two decennia have transformed that logic. Another possibility is that the existing typologies of hypertransitional careers are too crude to capture the variety of factors at play, as well as the interactive nature of career outcomes with aspects of gender and career (meta-)competencies.

The historical setting of the sample is one of the potential limitations to this study, since the contemporary career scholars generally agree on the transformation of the socio-economic context in

the recent decennia. However, this research will provide a valuable comparison base when matched against the analysis of more contemporary data.

Another issue that limits our interpretations is the virtual absence of subjective indicators in regard to career. While the longitudinal study such as SHARELIFE precludes the use of such indicators by design, the exact meaning of career types for the individuals in question remains somewhat unexplained. This too entails a possibility of a cruder categorization, than it would be conceivable with such indicators at hand.

Finally, since the analysis is limited to Belgium alone, cultural and institutional factors that may mediate the connection between the career types and the variables employed, cannot be discerned. This limitation may also contribute to the discrepancy between our own findings and the recent empirical research on the new career patterns, on which we have based our hypotheses.

7 Acknowledgements

This study uses data from SHARELIFE release 1, as of November 24th 2010 or SHARE release 2.5.0, as of May 24th 2011. The SHARE data collection has been primarily funded by the European Commission through the 5th framework program (project QLK6-CT-2001- 00360 in the thematic program Quality of Life), through the 6th framework program (projects SHARE-I3, RII-CT- 2006-062193, COMPARE, CIT5-CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and through the 7th framework program (SHARE-PREP, 211909 and SHARE-LEAP, 227822). Additional funding from the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGHA 04-064, IAG BSR06-11, R21 AG025169) as well as from various national sources is gratefully acknowledged (see www.share-project.org for a full list of funding institutions).

8 Bibliography

- Abbott, A. (1990). A Primer on Sequence Methods. *Organization Science*, 1(4), 375-392.
- Anyadike-Danes, M., & McVicar, D. (2010). My Brilliant Career: Characterizing the Early Labor Market Trajectories of British Women From Generation X. *Sociological Methods & Research, 38*(3), 482 -512.
- Arthur, M. B. (1994). The Boundaryless Career: A New Perspective for Organizational Inquiry. *JOURNAL* OF ORGANIZATIONAL BEHAVIOR, 15(4), 295-306.
- Arthur, M. B., Claman, P. H., DeFillippi, R. J., & Adams, J. (1995). Intelligent Enterprise, Intelligent Careers. *The Academy of Management Executive (1993-2005), 9*(4), 7-22.
- Arthur, M. B., Hall, D. T., & Lawrence, B. S. (1989). *Handbook of career theory*: Cambridge University Press.
- Arthur, M. B., & Rousseau, D. M. (1996). *The boundaryless career: a new employment principle for a new organizational era*: Oxford University Press.
- Arthur, M. B., & Rousseau, D. M. (2001). *The Boundaryless Career: A New Employment Principle for a New Organizational Era*: Oxford University Press US
- Banai, M., & Harry, W. (2004). Boundaryless Global Careers: The International Itinerants. *International Studies of Management & Organization*, *34*(3), 96-120.
- Baruch, Y. (2004). Transforming careers: from linear to multidirectional career paths: Organizational and individual perspectives. *Career Development International, 9*(1), 58 73.
- Beck, U. (2000). The brave new world of work: Wiley-Blackwell.
- Bison, I. OM matters: the interaction effects between indel and substitution costs. *Methodological Innovations Online*, *4*(2), 53–67.
- Briscoe, J. P., & Hall, D. T. (2006). The interplay of boundaryless and protean careers: Combinations and implications. *JOURNAL OF VOCATIONAL BEHAVIOR, 69*(1), 4-18.
- Briscoe, J. P., Hall, D. T., & Frautschy DeMuth, R. L. (2006). Protean and boundaryless careers: An empirical exploration. *JOURNAL OF VOCATIONAL BEHAVIOR, 69*(1), 30-47.
- Burstein, P. (1994). *Equal employment opportunity: labor market discrimination and public policy:* Transaction Publishers.
- Cheramie, R. A., Sturman, M. C., & Walsh, K. (2007). Executive career management: Switching organizations and the boundaryless career. *JOURNAL OF VOCATIONAL BEHAVIOR*, 71(3), 359-374.
- Cinamon, R. G., & Rich, Y. (2002). Gender differences in the importance of work and family roles: Implications for work-family conflict. *Sex Roles, 47*(11-12), 531-541.
- Clark, A. E. (1997). Job satisfaction and gender: Why are women so happy at work? *Labour Economics,* 4(4), 341-372.
- Clogg, C. C., Eliason, S. R., & Wahl, R. J. (1990). Labor-Market Experiences and Labor-Force Outcomes. *American Journal of Sociology*, 95(6), 1536.
- Cutright, P. (1971). Income and Family Events: Marital Stability. *Journal of Marriage and Family, 33*(2), 291-306.
- De Winne, S., Stynen, D., Gilbert, C., & Sels, L. (2008). Is meer personeel in beweging beter? *Gedrag en organisatie: tijdschrift voor sociale, arbeids- en organisatiepsychologie, 21*(4), 344-364.
- De Winne, S., Stynen, D., Gilbert, C., & Sels, L. (2009). De gevolgen van arbeidsmobiliteit: een overzicht op macro-, meso- en microniveau (pp. 23). Leuven: Steunpunt WSE.
- Defillippi, R. J., & Arthur, M. B. (1994). The boundaryless career: A competency-based perspective. JOURNAL OF ORGANIZATIONAL BEHAVIOR, 15(4), 307-324.
- Eby, L. T. (2001). The boundaryless career experiences of mobile spouses in dual-earner marriages. *Group & Organization Management, 26*(3), 343-368.

- Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. JOURNAL OF ORGANIZATIONAL BEHAVIOR, 24(6), 689-708.
- Edgell, S. (2006). *The sociology of work: continuity and change in paid and unpaid work*: Pine Forge Press.
- Ensher, E. A., Murphy, S. E., & Sullivan, S. E. (2002). Boundaryless Careers in Entertainment: Executive Women's Experiences. In M. Peiperl, M. B. Arthur & N. Anand (Eds.), *Career creativity: Explorations in the Remaking of Work*: Oxford University Press.
- Ferber, M. A. (1982). Labor Market Participation of Young Married Women: Causes and Effects. *Journal of Marriage and Family,* 44(2), 457-468.
- Forret, M. L., Sullivan, S. E., & Mainiero, L. A. (2010). Gender role differences in reactions to unemployment: Exploring psychological mobility and boundaryless careers. JOURNAL OF ORGANIZATIONAL BEHAVIOR, 31(5), 647-666.
- Gabadinho, A., Ritschard, G., Studer, M., & Muller, N. S. (2009). Mining sequence data in R with the TraMineR package: A user's guide for version 1.21. Retrieved from <u>http://mephisto.unige.ch/traminer</u>
- Galligan, R. J., & Bahr, S. J. (1978). Economic Well-Being and Marital Stability: Implications for Income Maintenance Programs. *Journal of Marriage and Family*, 40(2), 283-290.
- Gerber, M., Wittekind, A., Grote, G., & Staffelbach, B. (2009). Exploring types of career orientation: A latent class analysis approach. JOURNAL OF VOCATIONAL BEHAVIOR, In Press, Corrected Proof
- Goldberg, H. (1987). Hazards of Being Male: Surviving the Myth of Masculine Privilege: Signet.
- Goldin, C. (2006). The Quiet Revolution that Transformed Women's Employment, Education, and Family. *National Bureau of Economic Research Working Paper Series, No. 11953*.
- Guest, D., & Sturges, J. (2007). Living to Work Working to Live: Conceptualizations of Careers among Contemporary Workers. In H. Gunz & M. Peiperl (Eds.), *Handbook of career studies*: Sage Publications.
- Gunz, H., Evans, M., & Jalland, M. (2000). Career Boundaries in a 'Boundaryless' World. In M. Peiperl, M. B. Arthur, R. Goffee & T. Morris (Eds.), *Career frontiers: new conceptions of working lives* (pp. 290): Oxford University Press.
- Hakim, C. (1996). Labour mobility and employment stability: rhetoric and reality on the sex differential in labour-market behaviour. *European Sociological Review*, *12*(1), 1-31.
- Hall, D. T. (1976). *Careers in organizations*: Goodyear Pub. Co.
- Hall, D. T. (1996a). The career is dead--long live the career: a relational approach to careers: Jossey-Bass Publishers
- Hall, D. T. (1996b). Protean Careers of the 21st Century. *The Academy of Management Executive* (1993), 10(4), 8-16.
- Hall, D. T. (2004). The protean career: A quarter-century journey. JOURNAL OF VOCATIONAL BEHAVIOR, 65(1), 1-13.
- Halpin, B. (2010). Optimal Matching Analysis and Life-Course Data: The Importance of Duration. Sociological Methods & Research, 38(3), 365 -388.
- Hayward, M. D., Friedman, S., & Chen, H. (1998). Career trajectories and older men's retirement. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences, 53*(2), S91-103.
- Hochschild, A. R., & Machung, A. (1989). *The second shift*: Penguin Books.
- Inkson, K. (2006). Protean and boundaryless careers as metaphors. JOURNAL OF VOCATIONAL BEHAVIOR, 69(1), 48-63.
- Jaumotte, F. (2003). Female labour force participation: past trends and main determinants in OECD countries OECD Economics Department Working Papers, No. 376: OECD.
- King, Z., Burke, S., & Pemberton, J. (2005). The 'bounded' career: An empirical study of human capital, career mobility and employment outcomes in a mediated labour market. *HUMAN RELATIONS*, 58(8), 981-1007.
- Kovalenko, M., & Mortelmans, D. (2010). Determinants of alternative career paths. An international comparison of the empirical literature (pp. 103). Brussels: Steunpunt WSE.

- Lesnard, L. (2010). Setting Cost in Optimal Matching to Uncover Contemporaneous Socio-Temporal Patterns. *Sociological Methods & Research, 38*(3), 389 -419.
- Levant, R. F., & Pollack, W. S. (2003). A new psychology of men: Basic Books.
- Litzky, B. E., Purohit, Y. S., & Weer, C. H. (2008). Beliefs about the success of dual-earner relationships: toward the development of a normative beliefs measurement scale. *North American Journal* of Psychology, 10(3).
- London, M. (1983). Toward a Theory of Career Motivation. *The Academy of Management Review, 8*(4), 620-630.
- Mallon, M. (1999). Going "portfolio": making sense of changing careers. *Career Development International, 4*(7), 358 - 370.
- Marler, J. H., & Moen, P. (2005). Alternative Employment Arrangements: A Gender Perspective. Sex Roles: A Journal of Research, 52(5-6), 337-349.
- Marler, J. H., Woodard Barringer, M., & Milkovich, G. T. (2002). Boundaryless and traditional contingent employees: worlds apart. *JOURNAL OF ORGANIZATIONAL BEHAVIOR*, 23(4), 425-453.
- Mayrhofer, W., Meyer, M., Steyrer, J., Maier, J., Langer, K., & Hermann, A. (2004). International Career Habitus: Thick Descriptions and Theoretical Reflections *Academy of Management Annual Meeting Symposium on Global Careers and Human Resource Development: Emerging IHRM Perspectives New Orleans, USA*.
- Mortelmans, D., Ottoy, W., & Verstreken, M. (2003). Een longitudinale kijk op de gender-verdeling van huishoudelijke taken. *Tijdschrift voor sociologie, 24*(2/3), 237-260.
- Murolo, P. (1997). *The common ground of womanhood: class, gender, and working girls' clubs, 1884-1928*: University of Illinois Press.
- Neugarten, B. L., Moore, J. W., & Lowe, J. C. (1965). Age Norms, Age Constraints, and Adult Socialization. *American Journal of Sociology*, *70*(6), 710-717.
- Peiperl, M., Arthur, M. B., & Goffee, R. (2000). *Career frontiers: new conceptions of working lives*: Oxford University Press.
- Reitman, F., & Schneer, J. A. (2003). The promised path:a longitudinal study of managerial careers. *Journal of Managerial Psychology*, 18(1), 60 - 75.
- Reitzle, M., Körner, A., & Vondracek, F. W. (2009). Psychological and demographic correlates of career patterns. *JOURNAL OF VOCATIONAL BEHAVIOR*, 74(3), 308-320.
- Schmid, G. (2002). The dynamics of full employment: social integration through transitional labour markets: Edward Elgar Publishing
- Scott, J. W., & Tilly, L. A. (1975). Women's Work and the Family in Nineteenth-Century Europe. *Comparative Studies in Society and History*, 17(1), 36-64.
- Segers, J., Inceoglu, I., Vloeberghs, D., Bartram, D., & Henderickx, E. (2008). Protean and boundaryless careers: A study on potential motivators. *JOURNAL OF VOCATIONAL BEHAVIOR*, 73(2), 212-230.
- Shank, S. E. (1988). Women and the Labor Market: The Link Grows Stronger. *Monthly Labor Review*, 111(3), 3-8.
- Sullivan, S. E. (1999). The changing nature of careers: a review and research agenda. *Journal of Management*, 25(3), 457-484
- Sullivan, S. E., & Mainiero, L. A. (2007). The changing nature of gender roles, alpha/beta careers and work-life issues: Theory-driven implications for human resource management. *Career Development International*, *12*(3), 238-263.
- Valcour, M., & Tolbert, P. (2003). Gender, family and career in the era of boundarylessness: determinants and effects of intra- and inter-organizational mobility. *The International Journal of Human Resource Management*, 14(5), 768-787.
- Valgaeren, E. (2008). *Nomadic careers in the Flemish IT-sector: fact or fiction?* Paper presented at the First ISA Forum of Sociology, Barcelona, Spain.

- Van Buren, H. J. (2003). Boundaryless Careers and Employability Obligations. *Business Ethics Quarterly*, 13(2), 131-149.
- Volmer, J., & Spurk, D. (2010). Boundaryless and Protean Career Attitudes: Relationsips with Subjective and Objective Career Success. *Zeitschrift für ArbeitsmarktForschung*, 43(3), 207-218. doi: 10.1007/s12651-010-0037-3
- Woodd, M. (2000). The move towards a different career pattern: are women better prepared than men for a modern career? *Career Development International, 5*(2), 99-105.
- Wu, L. L. (2000). Some Comments on "Sequence Analysis and Optimal Matching Methods in Sociology: Review and Prospect". Sociological Methods & Research, 29(1), 41 -64.

9 Appendix I: Ungrouped Cluster Means

	Stepping	g stone gro	up	HT	IT	P > F		
	SS 1	<i>SS 2</i>	<i>SS 3</i>	<i>SS</i> 4	<i>SS</i> 5			
Retirement age	59.60	59.65	59.10	60.03	60.60	60.41	64.29	0.0127
Voluntariness index	0.508	0.690	0.687	0.720	0.704	0.698	0.524	<.0001
Age	67.46	68.15	68.76	70.09	67.89	71.46	65.03	0.0034
	1					-		_
Career satisfaction	1.66	1.61	1.55	1.58	1.79	1.48	2.21	<.0001
Career disappoint.	2.30	3.03	3.06	2.98	2.99	2.92	2.35	<.0001
Achievement satisf.	1.70	1.77	1.63	1.64	1.87	1.60	2.12	<.0001
Sacrificed too much	2.76	2.75	2.77	2.80	2.49	2.71	2.92	0.1192
Health suffered	2.91	2.91	3.00	2.95	2.78	2.77	2.49	0.0129
	1		l		1		I.	
# marriages	1.05	1.03	1.05	1.09	1.10	1.18	1.11	0.1453
# children	2.47	2.38	2.46	2.35	2.27	2.45	1.98	0.2568
Wage main job ²³ EUR	1836	1820	1880	1705	1677	1667	1641	0.8762
Home owner	1.17	1.16	1.19	1.34	1.27	1.33	1.55	<.0001
Active career years	37.61	38.41	38.62	39.88	38.47	40.47	23.82	<.0001
Years FT education	13.04	12.77	11.94	11.49	11.97	11.64	10.08	<.0001
Health general	2.83	2.81	2.95	3.05	2.95	2.91	3.15	0.1315
Long-term illness	1.64	1.65	1.65	1.58	1.59	1.57	1.43	0.1195

Table 9: Ungrouped cluster means for men (ANOVA)

²³ Income for self-employed.

	Stepping	Stepping stone group					IT	P > F
	SS 1	<i>SS 2</i>	<i>SS 3</i>	SS 4	SS 5			
Health limits	1.83	1.83	1.80	1.82	1.85	1.81	1.57	0.0020
work								
Depression,	1.74	1.75	1.72	1.77	1.72	1.78	1.63	0.6228
sadness								
Hopes for future	1.11	1.10	1.11	1.07	1.10	1.15	1.20	0.4368

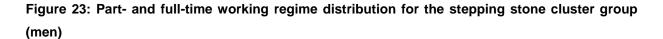
Table 10: Ungrouped cluster means for women (ANOVA)

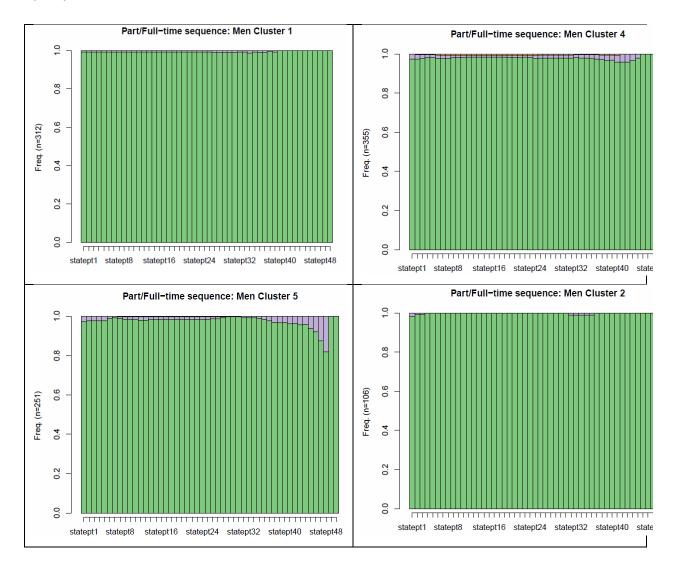
	Steppin	ng stone	group	HT	INA	MIX	UNE	P > F
	SS1	SS2	SS3					
Retirement age	57.14	57.25	59.37	61.25	63.77	62.55	61.47	<.0001
Voluntariness index	0.46	0.63	0.62	0.66	0.77	0.60	0.50	<.0001
Age	64.70	65.78	63.92	63.70	71.31	66.70	68.51	<.0001
Career satisfaction	1.61	1.63	1.76	1.87	2.08	1.85	2.21	<.0001
Career disappoint.	3.00	3.12	2.45	2.63	3.00	3.00	2.77	<.0001
Achievement satisf.	1.75	1.72	1.69	1.90	1.92	1.82	2.09	0.0001
Sacrificed too much	2.72	2.83	2.83	2.73	3.08	2.82	3.02	<.0001
Health suffered	2.72	3.00	2.81	2.65	3.21	2.84	2.80	<.0001
# marriages	1.00	1.06	1.08	1.14	1.09	1.10	1.05	0.0447
# children	2.10	2.26	2.20	1.98	2.76	2.31	2.84	<.0001
Wage main job ²⁴ EUR	1391	1122	1235	1492	249	786	626	<.0001
Home owner	1.15	1.19	1.20	1.31	1.29	1.27	1.29	<.0001
Active career years	35.79	34.45	35.86	35.41	8.10	24.46	15.65	<.0001
Years FT education	13.74	12.08	12.50	11.83	10.58	10.94	10.28	<.0001
Health general	2.86	2.90	2.60	2.87	3.13	2.98	3.10	0.0013
Long-term illness	1.57	1.61	1.68	1.54	1.57	1.52	1.51	0.3013
Health limits work	1.76	1.79	1.86	1.87	1.79	1.71	1.75	0.0445
Depression, sadness	1.58	1.60	1.61	1.50	1.57	1.58	1.39	0.1002
Hopes for future	1.11	1.11	1.13	1.13	1.14	1.10	1.15	0.8987

²⁴ Income for self-employed.

10 Appendix II: Part- And Full-Time Work

10.1 Men





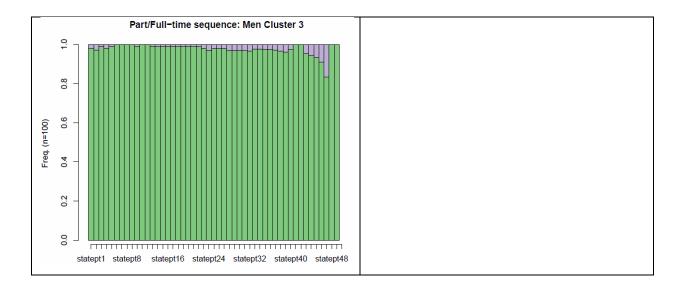
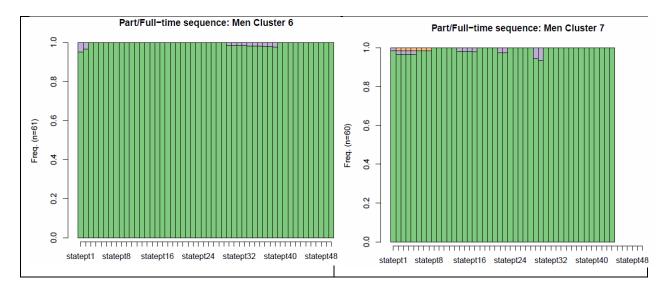


Figure 24: Part- and full-time working regime distribution for hypertransitional and intermittent clusters (men)



10.2Women

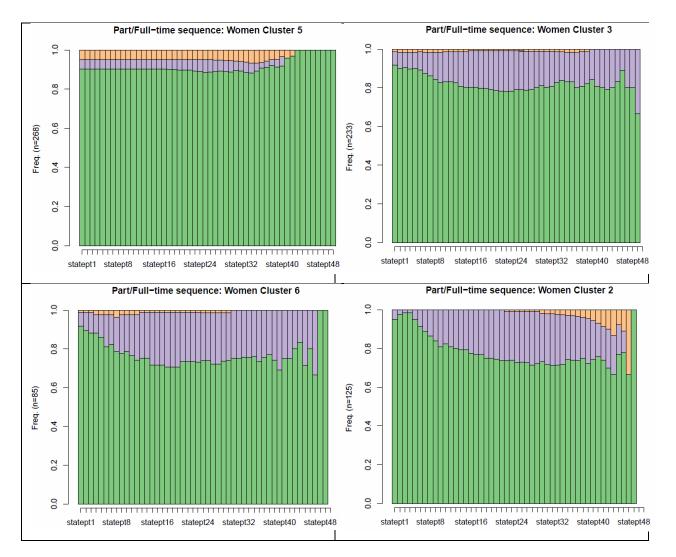


Figure 25: Part- and full-time working regime distribution for the stepping stone group and the hypertransitional cluster (women)

Figure 26: Part- and full-time working regime distribution for housewife/inactive and mixed (work-inactivity) clusters (women).

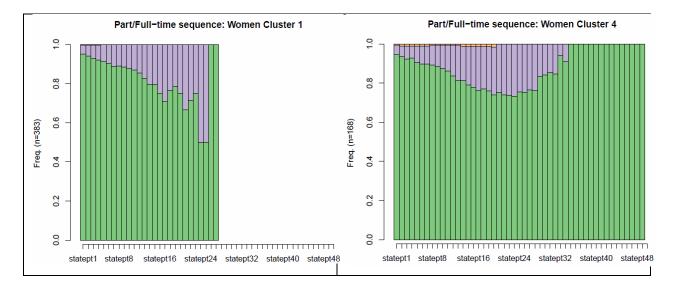
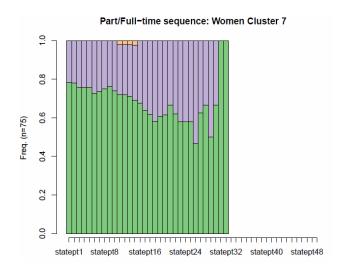


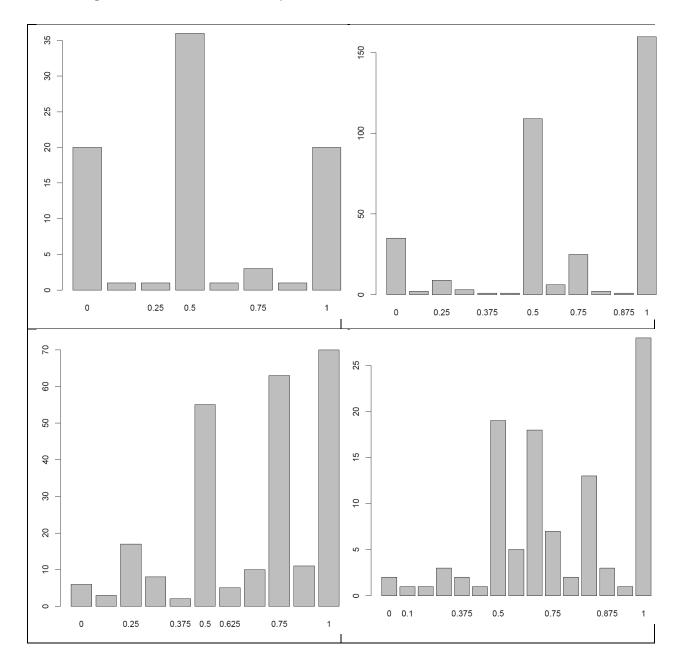
Figure 27: Part- and full-time working regime distribution for housewife/unemployed cluster (women).



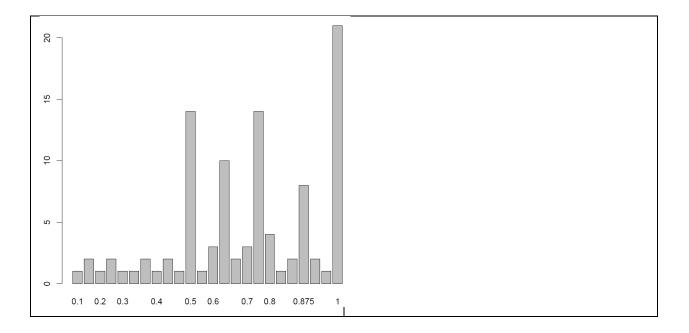
11 Appendix III: Voluntariness Index

11.1 Men

Figure 28: Transition voluntariness index distribution for the "stepping stone" cluster set (men, increasing order of transition numbers).

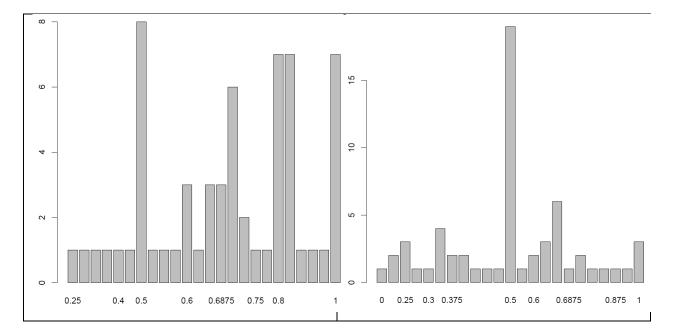


65



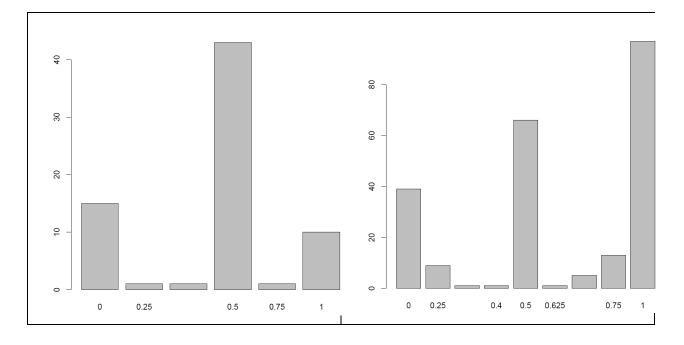
The figure above shows that career transitions in the *stepping stone* group of clusters are mostly voluntary. However, there is a visual contrast between the first *stepping stone* cluster and the last three, while the second cluster of the group takes the transitional form between the two types. The voluntariness index of the *stepping stone 1* cluster, a classic ideal type of the traditional career, is normally distributed, having a similar amount of voluntary and involuntary transitions. In the subsequent clusters the distribution of the index is skewed to the right, implying that job changes in these clusters tend to be largely in function of respondent's own decisions.

Figure 29: Transition voluntariness index distribution hypertransitional (left) and intermittent (right) career variations (men).



11.2Women

Figure 30: Transition index distribution for "stepping stone" career variations and the hypertransitional cluster (women)



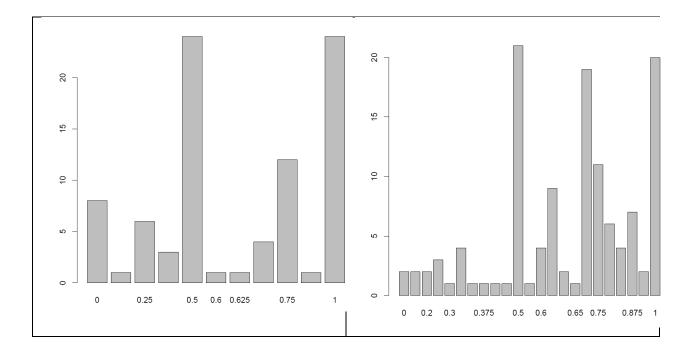
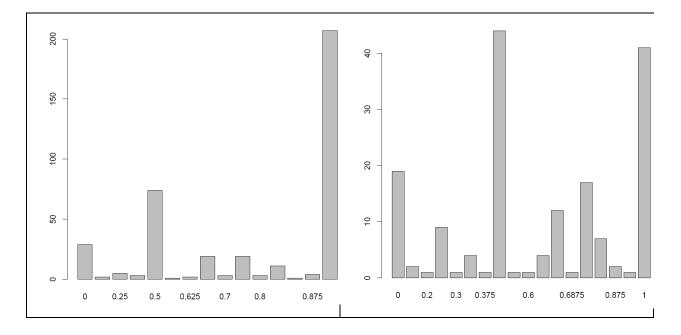


Figure 31: Transition index distribution for housewife/inactive and mixed (work-inactivity) clusters (women).



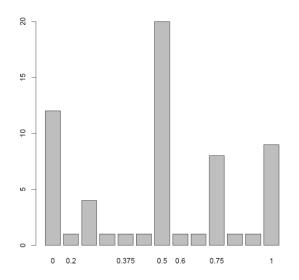


Figure 32: Transition index distribution for housewife/unemployed career types (women).

The variety of women's career pattern groups makes the comparison with the male subsample quite difficult, as there are simply no counterparts for clusters such as *mixed* or *housewife/inactive* in the male taxonomy. If the dimensionality of male clusters was easily reducible to the factors of initial mobility and career stability, women's clusters cannot be ordered as simply, with the only exception of the *stepping stone* group. We can expect that there are three large groups of career types, differentiated per work-family balance orientation.

12 Appendix IV: Variable Coding

Table 11 Variable coding

Voluntariness index	Higher index values imply a larger proportion of voluntary transitions
	Lower scores imply better satisfaction for the following items:
Career satisfaction	Q: All things considered, I am satisfied with my job career.Would you say you 1. Strongly agree 2. Agree 3. Disagree 4. Strongly disagree
Career disappoint.	I experienced a major disappointment in my job career (idem).
Achievement satisf.	Considering all my efforts, I am satisfied with my work achievements (idem)
Sacrificed too much	People close to me said I sacrificed too much for my job (idem)
Health suffered	My health has suffered from my job (idem)
Home owner	1 = yes, 2 = no
Health general	Would you say your health is
	1. Excellent 2. Very good 3. Good 4. Fair 5. Poor
Long-term illness	Do you have any long-term health problems, illness, disability or
	infirmity?
	1 = yes, 2 = no
Health limits work	Do you have any health problem or disability that limits the kind or
	amount of paid work you can do?
	1 = yes, 2 = no
Depression, sadness	In the last month, have you been sad or depressed?
	1 = yes, 2 = no
Hopes for future	What are your hopes for the future?
	1 = any hopes mentioned, 2 = no hopes mentioned