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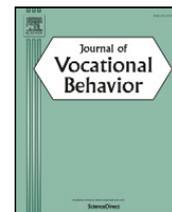
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Managerial career patterns: A review of the empirical evidence

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ABSTRACT

Despite the ubiquitous presence of the term “career patterns” in the discourse about careers, the existing empirical evidence on (managerial) career patterns is rather limited. From this literature review of 33 published empirical studies of managerial and similar professional career patterns found in electronic bibliographic databases, it is clear that upward mobility is still the norm, even when contrasting traditional to “new” careers. We argue that the nature and number of unique career patterns identified is strongly influenced by *where* and *when* the data were collected (i.e. empirical access), and *how* career patterns are measured. Our review further shows organizations clearly still act as containing social structures for the patterning of managerial careers, and that contemporary managerial careers, despite some evidence of increasing inter-organizational mobility, have new boundaries which induce linearity. We provide insights for further conceptualization of managerial career patterns and for advancing methodological approaches, including the use of optimal matching analysis and narratives. By expanding the scope of career pattern dimensions beyond time and direction, this review provides ground for further research on managerial career patterns.

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Career scholars have long been fascinated by the “mutually recursive effects of careers and organizations on one another” (Higgins & Dillon, 2007, p. 431), especially when it comes to the careers of those in managerial or executive positions. As early as 1980, Super suggested a model of “cycling and recycling” through career stages (Super, 1980, p. 293), which was advantageous in a climate of rapid social change and a significant departure from the stable and conventional career patterns previously considered ideal (Smart & Peterson, 1997). In fact, Louis (1980) suggests that the norm of remaining with one organization for life had already given way to a pattern of periodic job changing and a trend toward serial professions since the 1930s. Around 1990, in response to increased competitive pressure in most Western nations, many organizations started restructuring and de-layering, which resulted in no longer promising lifetime employment, but promoting individual employability (Baruch, 2006). Following these developments, both Arthur (1994) and Hall (1996) announced the demise of the organizational career and the emergence of the so-called “new” career. Grzeda (1999) proposed various ways in which such structural organizational changes would lead to the emergence of new managerial career patterns. In addition, he set a research agenda in order to close the gap between well-established notions of the changing nature of management and the slow-to-follow investigation, conceptualization, and theorization of managerial career patterns.

While numerous authors have conceptualized and studied the “new” career over the past 15 years, focusing mainly on the “protean career” orientation (Hall, 1996), and the “boundaryless career” concept (Arthur, 1994), the study of career patterns (Higgins & Dillon, 2007) has not followed suit. A recent review of research on careers does contrast new to traditional career patterns and talks about “the variety of career patterns that are being enacted in today’s dynamic work environment” (Sullivan & Baruch, 2009, p. 1554), but does not provide specific evidence on what contemporary managerial careers look like, nor on which patterns can be distinguished. While Inkson (1995) showed how the changing economic situation and organizational restructuring affected managerial careers, he focused on single mobility events rather than career patterns. To our knowledge, the call by Grzeda (1999) for empirical evidence and conceptualization on (emerging) managerial career patterns has not received much follow-up since then. In addition, most contemporary organizations, even after restructuring and de-layering, “typically have a core structure, based on [a] more or less clear hierarchy, forming climbing frames for hierarchical mobility” (Baruch, 2006, p. 128). As a consequence, contemporary managerial careers are still often described and evaluated in “organizational terms, with implied notions of hierarchical movement” (Arnold & Cohen, 2008, p. 8). Hall and Las Heras (2009) state that the traditional organizational career with a focus on upward mobility is in fact alive and well rather than dead, in contrast to the prophecy. The articles collected by Dries and Verbruggen (2012) in a Journal of Vocational Behavior Special Section on “Fresh perspectives on the ‘new’ career” provide compelling empirical evidence that challenges common assumptions from the “new” careers literature.

Based on the above, we argue that the (extent of) the variety in contemporary managerial career patterns remains largely unknown, nor do we know the degree to which these patterns are “new” in the sense of being different from managerial career patterns described by careers researchers prior to the 1990s. The urge to address this lack of knowledge was triggered by a noteworthy discussion at a get together of career scholars from various countries and levels of seniority in Amsterdam in 2008. While we spent three days talking about careers in the 21st century and had some notions of different possible career patterns “out there”, we came to the joint conclusion that we did not have any idea about the extent of existing empirical evidence on career patterns in general and of managerial careers in particular. The review of empirical evidence on managerial career patterns we present below addresses this knowledge gap.

1. Definition and delineation

As a starting point for our review of the existing empirical evidence on (managerial) career patterns, we first looked for a working definition of career patterns that could serve as a demarcation for studies to in- and exclude in the review. Form and Miller (1949) “coined the term ‘occupational career pattern’ to denote the sequence and duration of work positions occupied by an individual” (Savickas, 2002, p. 382). Super (1954), using a longitudinal perspective on working life, developed the so-called Career Pattern Study (or CPS; see Super, 1985), and described the origins of the construct of career patterns in industrial sociology where “it was viewed, objectively, as the number, duration, and sequence of jobs in the work history of individuals” (Savickas, 2001, p. 54), which we have adopted as our definition.

Typically, career patterns are interpreted as objectively observable paths of movement through organizational or occupational hierarchies (Arnold & Cohen, 2008), but our interpretation of career patterns is also shaped by Driver's definition of a career pattern as an enduring cognitive or conceptual structure underlying individuals' thinking about their career (Driver, 1979).

Savickas (2002) argues that the notion of development, of movement through time, is fundamental to the career concept. As career is typically defined as an "unfolding sequence of a person's work experience over time" (Arthur, Khapova, & Wilderom, 2005, p. 178), "the word 'career' brings with it a connotation of progression or development along some course" (Dalton, 1989, p. 89). Career patterns are sequences of career experiences in a dynamic sense (Higgins & Dillon, 2007). We therefore assume that *time* is the basic dimension (X-axis) in any representation of career patterns. The second important dimension (often the Y-axis) of conceptualizations and representations of career patterns dominant in the literature is *direction* or progress which refers to notions such as upward, lateral, and downward movements (Reitzle, Körner, & Vondracek, 2009). Upward mobility in the sense of moving up from one hierarchical level to the next, is automatically associated with more pay, greater responsibilities, and more status (Ng, Eby, Sorensen, & Feldman, 2005), which are all traditional indicators of objective career success.

Beyond time and direction, Schein (1971) conceptualized the organization as a three-dimensional shape like a cone, with rank (i.e. hierarchy), centrality, and function serving as career pattern dimensions. While traditional careers took place within single (or limited numbers of) organizations, the notion of increased inter-organizational mobility is central to the concept of "new" careers. The idea that boundaries that traditionally limited mobility are more frequently crossed than before is reflected in the "boundaryless career" concept (Arthur, 1994). Starting from this premise, Baker and Aldrich (1996) suggested three career pattern dimensions contrasting traditional to new careers, namely single versus multiple employers, knowledge cumulation, and expression of identity.

Based on these definitions and conceptualizations, we view career patterns are different from career orientations (Derr, 1986), career anchors (Schein, 1971, 1974), and career values (Super, 1957), which may be viewed as antecedents or determinants of career patterns. Work role or career transitions (Nicholson, 1984; Nicholson & West, 1988), defined as the process of disengaging from prior roles and engaging in new roles (Ashforth & Saks, 1995), serve as important demarcation points in individual career patterns. In fact, as argued by Gunz (1988), work role transitions are "what distinguish organizational and managerial careers from other careers" (p. 539), as these are points at which individuals move up and across the hierarchy. While the sequential aspect of careers implies the experience of transitions, such transitions are not identical to career patterns in our understanding of the term and studies of (single) transitions are thus excluded from this review. However, we do consider empirical studies of (managerial) career trajectories, career paths, career histories, and mobility patterns as potentially relevant for our review.

While our focus is on career patterns of managers and executives in medium to large sized organizations, we are also interested in career patterns of those professionals whose careers often run parallel to managerial careers, such as careers in accountancy firms, as well as in careers of those who have moved from managerial careers to so-called post-corporate careers (as postulated by Peiperl & Baruch, 1997), such as independent consulting or entrepreneurship.

2. Research questions

With this definition and delineation of career patterns in mind, we embarked on a systematic search for and review of managerial and related professional career patterns on the basis of empirical data. In this effort, we tried to answer three related research questions: what is the extent of empirical evidence about (managerial) career patterns (e.g. how many articles are there and how can we categorize them?), what do career patterns "objectively" look like (e.g. what are relevant dimensions of career patterns beyond time and direction), and how are patterns typically measured and analyzed?

3. Search strategy

We searched several psychological, sociological, and management electronic databases for articles which had both "career" and "patterns" or "career patterns" in their title, abstracts, or keywords. Additionally, we searched for articles on "career histories", "career paths", "career trajectories", "life course histories", "life course patterns", and "mobility patterns". This search generated over 300 articles. From these sources, we concentrated on those published in peer-reviewed scientific journals, leaving about 100. Next, we selected articles that were based on or explicitly referred to empirical data, thus excluding theoretical conceptualizations of career patterns and practitioner-oriented pieces. In a next step, we excluded those articles that were based on general population or labor force panel data and articles about other types of careers than managerial and similar professional careers (e.g. accountants), dropping articles about the career patterns of artists, lawyers, musicians, mental patients, scientists, as well as those in (para)medical professions. At this point, we asked a few career scholars for suggestions on peer-reviewed empirical articles of career patterns they felt should be added to our list. This request, in addition to searching via the reference lists of all sources thus collected, and snowballing our way through the empirical evidence, helped to add several relevant articles and some book chapters.

After a first round of reading the collected articles, we decided to add again four sources from a relatively early date based on population or labor force panel data rather than only managers. We felt these studies had to be included, because the empirical work described helped shape theory and research about career patterns since the mid-20th century, as evidenced by the fact that many later authors focusing on managerial career patterns refer to them. This first round of reading also led to the exclusion of articles that did not actually measure, describe, or address career patterns in the body of the article (e.g. Ellis & Heneman, 1990). We also excluded a few studies that looked at single occurrences or simple frequencies of mobility events (e.g. Chen,

Veiga, & Powell, 2011), with the exception of some articles empirically measuring sequences of mobility events which contributed significantly to a better understanding of career patterns (e.g. Sheridan, Slocum, Buda, & Thompson, 1990). Finally, we made the decision, albeit difficult and somewhat arbitrary, to exclude a limited number of articles based on interview data in which the interviewees are asked to retrospectively reflect on their career (e.g. Cabrera, 2007). Although the findings of these studies are certainly interesting, we felt that neither this kind of anecdotal evidence nor the way it was analyzed contributed significantly to answering our research question on what managerial career patterns objectively look like.

4. Developing an organizing frame

4.1. Ordering principles

Our search and selection exercise generated a final selection of 33 unique studies (some of which are described in multiple publications), including the four early labor force or population panel data studies, which we will review in the first section below. In order to review the empirical evidence on managerial careers from the other 29 studies, we experimented with several ordering principles beyond chronological order. The distinction between traditional and “new” careers (Hall, 1996) did not serve our purposes as most of the empirical studies since the 1990s have implicitly or explicitly tried to find evidence for this distinction. Grouping the studies by methodological approach did not make sense either, because quite a few studies used a mix of different methods. Another potential ordering principle for reviewing the collected evidence was to look for pattern dimensions beyond time and direction. This led us to try to order studies by whether they looked at career patterns within or across organizations, industries, or occupations. As we discovered that the degree to which one finds such movements strongly depends on the nature of the sample and in what career stage or at what age people are studied, we ultimately decided on the ordering principle that we have labeled *empirical access*. Empirical access refers to the way the researchers purposefully or by coincidence managed to get access to the empirical data, with inherent consequences for the perspective on the career patterns studied and career pattern dimensions found.

4.2. Defining sets of papers

In the following review, we consequently distinguish between panel data studies (set A, n = 4), single organization studies (set B, n = 11), studies that focus on CEO and top management team (TMT) members (set C, n = 3), studies of the members of professional associations or other mid-career samples not related to the employing organization (set D, n = 10), and alumni panels (set E, n = 5). Fig. 1 represents these different sets of studies as well as the numbers in each set, by the age of the managers studied at the point of data collection as well as the degree to which they represent (movement within) single organizations or (movement across) multiple organizations. Looking at population, household, or labor force panel data representative for society in set A allows for observing a specific “starting population” from a certain age up to the present with potentially very different career developments inside the panel—naturally ranging across organizations, industries, occupations, as well as movements into and out of the labor force. The focus on one single organization in set B predominantly sheds light on intra-organizational careers, dominating early research on career patterns. In set C, TMTs or CEOs are sampled in an effort to look back at their career in order

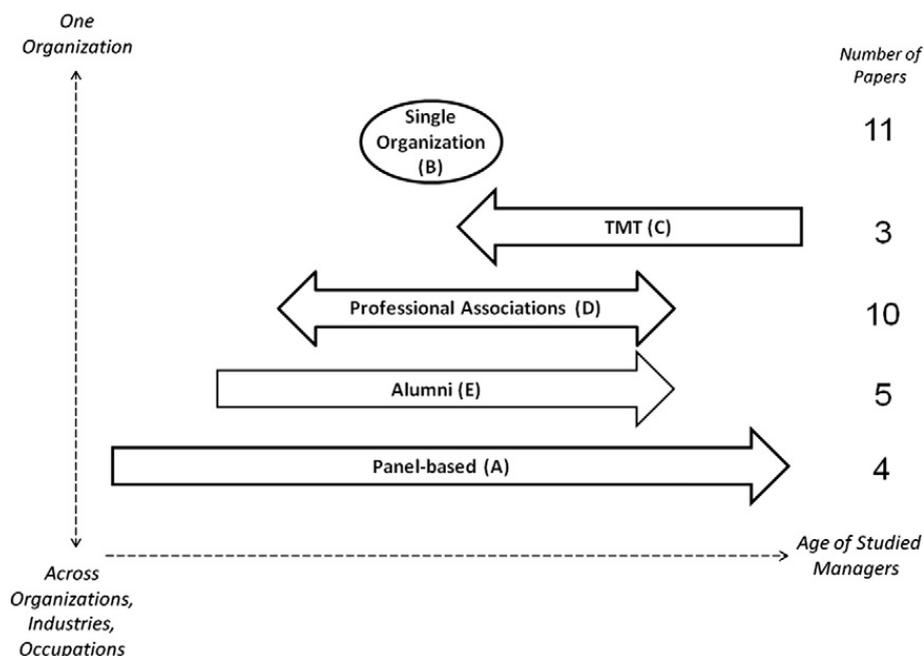


Fig. 1. Graphic representation of sources on managerial career patterns reviewed by empirical access.

to identify patterns. This pre-selection of candidates whose careers are objectively highly successful in one organization provides insights into potentially different but ultimately converging career patterns. Set D represents a number of different types of empirical access from a mid-career perspective. In most cases, the sample stems from members of a professional or occupational association, in a few from career service providers such as outplacement firms. Set E includes studies that look at alumni from specific education institutions such as business schools and their career patterns since graduation. Their later “starting point” compared to panel-based studies as well as the focus on one type of degree (often MBA) reduces occupational, functional, and industrial diversity, and pinpoints to subtle pattern differences among relatively similar careers. Finally, we review a number of other studies which did not meet our initial selection criteria for inclusion in the review, but that add valuable insights on conceptual and/or methodological aspects of studying managerial career patterns.

A table is provided as supplementary material (see [Appendix A](#)) in which the reviewed studies are presented per set, in chronological order, with some information on the career patterns identified and on the sample and design of the empirical study.

5. Empirical evidence of career patterns

5.1. Set A: Studies of career patterns based on population or labor-force panel data

[Form and Miller \(1949; Miller & Form, 1951\)](#), based on the occupational work histories of the employed population in Ohio (U.S.) in 1946, distinguished between secure and insecure career patterns. The underlying assumption of the patterns is three so-called stages to which jobs are linked according to their length: the “initial” stage (e.g. vacation work), the “trial” stage (from several days to 3 years), and the “stable” stage (more than 3 years). Form and Miller categorized the work histories into grids using these stages. In this manner, seven different secure career patterns, leading to a stable stage, and seven insecure patterns, leading to a trial stage, are described. The authors relate the 14 patterns to social origins, but the described stages are quite normative, and the definitions used for the different stages and patterns are unclear. In 1951, Miller and Form provided labels for the most dominant career patterns, namely secure patterns (stable and conventional), versus insecure patterns (unstable, single trial, disestablished, and multiple trial).

[Super \(1957\)](#), in “Psychology of careers”, described his theory of adult development in terms of career stages using a life-span approach, distinguishing between exploration, establishment, maintenance, and disengagement. To describe career patterns in the establishment and maintenance stages, he used data collected in the Career Pattern Study from several waves of studies among a panel of 100 men from Middletown (U.S.) who were 14 years old in 1951 ([Super, 1985](#)). Starting from the original taxonomy of Miller and Form, Super distinguished between four career patterns of men (stable, conventional, unstable, and multiple trial). Later, with a similar sample including women he identified and described seven (three identical and four unique) career patterns for women (i.e. stable working, stable homemaking, double-track, and interrupted).

[Wilensky \(1961\)](#) used White middle class men’s complete work histories to describe their career patterns and their effect on the kind and strength of their community and societal ties. Six patterns were distinguished on the basis of their orderliness and direction: orderly horizontal progression, orderly vertical progression, borderline orderly vertical progression, disorderly horizontal movement, disorderly vertical movement, and “one job for life”. Those with orderly patterns have better ties with community and society.

[Driver \(1979\)](#) postulated the career concepts model, in which he explores the three way fit of individual career patterns, organizational forces, and societal trends. Based on extensive psychometric studies with a variety of samples of labor force entrants and professionals in order to develop the career concept questionnaire, [Driver \(1980, 1982\)](#) distinguishes between four “objective” career patterns: transitory (with frequent changes of employment), steady state (in which the individual selects an occupation early in life and stays with it), linear (in which a field is chosen early in life, and a plan for upward movement is followed), and finally spiral (in which an individual develops in a given field and then moves on to another, related or unrelated area). [Brousseau and Driver \(1994; Brousseau, Driver, Eneroth, & Larsson, 1996\)](#) further elaborated on these career patterns or concepts, by reframing the steady state into an expert pattern and explaining how these concepts differ on the basis of their direction of movement (upward, little movement, or lateral), duration of stay in one field (life, 7–10 years, 3–5 years, or variable), and key motives (power achievement, security, creativity, or independence).

In summary, the earliest studies of career patterns that we found in our literature search are mid-20th century sociological and psychological studies ranging from 1949 to 1979 (with some more recent amendments) using population or labor force panel data not focusing exclusively on managerial careers. The studies in this set and the descriptions of the stability and direction of the careers patterns identified are seminal to later theorizing about and conceptualization of careers patterns, as evidenced in the articles of a later date in the other sets.

5.2. Set B: Studies of single organization or intra-organizational career patterns

[Rosenbaum \(1979, 1984\)](#) translated [Turner’s \(1960\)](#) models of contest mobility and sponsored mobility in education to upward mobility in organizational settings with numerous managerial levels. In contrast to [Turner’s \(1960\)](#) a-historical systems that are path independent, [Rosenbaum \(1979, 1984\)](#) proposed a *historical* model. This model is named the tournament mobility system, in which career patterns are modeled as taking part in a tournament. Only winners are promoted to compete at the next level (“round”) of the tournament. Winners keep adding advantages, so a tournament leads to accelerated career growth for

winners, that is to exponential promotion speed and salary growth. The main contribution of Rosenbaum (1979) is his description of intra-organizational career patterns based on tournament mobility, in showing that mobility early in the career has an unequivocal relationship with later promotion or demotion within a large U.S. manufacturing company. Specifically, his analysis of data from the company's personnel records shows that those who get promoted earlier reach higher career floors and career ceilings than those who get promoted later. In terms of the upwardly mobile career pattern, the highest possible career attainment thus requires an early promotion (within the first three years after organizational entry).

Veiga (1981) added to the description of intra-organizational career patterns by comparing the career patterns and especially mobility events as measured by a survey among a sample of managers from three U.S. organizations within one industry. The careers of managers who have been in a position for seven years or more are described as having reached a plateau. This group is compared to non-plateaued managers, and based on their average percentage increase in salary categorized into either "dead-woods" and "solid citizens" or "solids". There is a clear difference between these three categories in terms of the timing of mobility events and types of career moves made.

Forbes (1987) has described similarly the impact of early inter- versus intra-organizational moves in more detail based on the personnel file information on managers of an U.S. oil company. Contrary to Rosenbaum's (1979) findings, Forbes' data show that "losers" in the early rounds are not necessarily penalized later, and later promotions are more predictive of career success than earlier ones. This difference may in a large part be explained by research setting (i.e. a different organizational setting in a different economic situation), but is also influenced by functional area (with those in administrative positions requiring earlier moves than those in technical positions), and by the number of different positions held (with more positions being more beneficial for final career attainment). Forbes (1987) states that his results, compared to the Rosenbaum (1979) study, support an alternative historical model in which past position, career movement, and functional background ultimately determine upward mobility.

Gunz (1988) distinguishes between managerial career "logics" or patterns based on a conceptualization of relevant organizational characteristics. Based on two underlying dimensions (i.e. organizational *structure* in terms of being (non-) recursive and organizational *growth* as being (un-) patterned), he argues that different combinations of organizational characteristics give rise to different career patterns. Using interview data describing work role transitions from 150 managers of four large U.K. manufacturing firms, Gunz proceeds to find empirical evidence for three types of organizational career logics with associated patterns of work role transitions. Five types of work role transitions are distinguished, based on an analysis of tasks, activities, and location; namely continuity, cosmopolitanism, novelty, iteration, and expansion. Depending on the organizational structure and growth, the following career logics are described. "Constructional" career logics exist in an organization characterized by a non-recursive structure, and patterned growth. The main transition type is novelty, so constructional logics involve collecting a variety of experiences. In a "command-centered" career logic (recursive structure, patterned growth), the main transition is cosmopolitanism, which involves collecting similar experiences across different settings. Finally, in a "evolutionary" career logic (non-recursive structure, un-patterned growth) the main transition type is expansion, or collecting expanding experiences. The fourth theoretically conceivable logic (i.e. a career logic following from an organization characterized by a non-recursive structure and un-patterned growth) according to Gunz is not a likely occurrence, therefore he does not describe this logic.

In their study of the career tournament in a large U.S. public utility company using survival analysis on data from personnel records, Sheridan et al. (1990) show that indeed early career success is decisive in higher upward mobility and salary progression, and especially for those who are hired as a management trainee (compared to direct hires into management or promoted from a non-management positions) or started in a high-power department. Interestingly, Sheridan et al. (1990) state that when organizations reduce the number of middle-level management positions (as indeed many organizations have done in the 1980s), such early career signals will become even more important. Because of a lack of middle-management jobs formerly used to groom managers for top positions, the ideal career pattern may thus no longer be one of fast hierarchical advancement, but become one of fast moving or "churning" through different jobs at the same hierarchical level (Sheridan et al., 1990).

Similar to Sheridan et al. (1990), the consequences for managerial and professional careers of organizational restructuring (downsizing and/or de-layering) are also addressed by Martin, Riemens, and Wajcman (2000). These authors describe consequences of organizational change for career patterns, (as well as career aspirations and orientations) within six large Australian organizations from different sectors where (some) restructuring had taken place in the years prior to the study. Based on interviews and a survey Martin et al. (2000) did not find clear evidence for the two typical types of career patterns they had expected to find, namely the "organization man" versus the "portfolio career", nor of the two typical reactions to restructuring mentioned in the literature, namely mass disaffection and frustration over lowered career horizons versus a heightened sense of autonomy and self-fulfillment. Rather than being affected by restructuring, what constituted the typical career pattern clearly depended on the sector, with longer tenure and fewer inter-organizational moves for the manufacturing / engineering sector compared to the financial sector, with those labeled professionals (lawyers, accountants, and IT specialists) making more frequent inter-organizational (intra-occupational) moves than managers and engineers. Evidently, both managers and professionals are negotiating their way through restructuring episodes with a generally positive attitude and confidence in their marketability.

Similarly, McDonald, Brown, and Bradley (2005) have studied whether the career patterns of senior managers in a large public sector agency in Australia can be described as traditional (in terms of vertical progression or upward mobility as defined by the organization) or "protean" (in the sense that the individual rather than the organization is ultimately responsible for career development, see Hall, 1996). Interview and survey data were coded into four categories which distinguish between the two types of career patterns: development, orientation, definition of success, and organizational environment. Within this particular setting, the "traditional career which relies on length of service, geographic mobility, and a steady climb up the corporate ladder" (McDonald et al., 2005, p. 109) was the dominant model. However, some elements of the protean career pattern were also evident, and especially for women.

Ishida, Su, and Spilerman (2002) describe and evaluate different conceptual mobility systems: seniority-based progression, the late selection model, the tournament model, the sponsored model, the gate-keeping model, and the contest model. Using personnel records from a Japanese and a U.S. company, they relate the time-in-rank on the chances of subsequent promotion. For the Japanese firm, late selection is the norm (with a minimum of ten years), but those who were promoted relatively late from non-management to lower management had significantly lower chances of promotion to both middle and upper management; and those who were promoted relatively early (less than ten years) did not benefit in the promotion process. Also, for the U.S. firm, those promoted late were disadvantaged in subsequent promotions, and early movers did not benefit either. This is inconsistent with the tournament mobility model. Instead, the promotion process in both companies can be described as a “two-step process of selection: the gate-keeping model, which filters out a small portion of employees who do not meet the minimum standards, and the contest model, which allows the remaining employees to compete for higher positions without being affected by their earlier performance” (Ishida et al., 2002, p. 179). However, this two-step process plays out differently in both companies and is affected by societal and economic factors largely outside the companies’ control.

Graen, Dharwadkar, Grewal and Wakabayashi (2006) also describe career patterns and mobility systems in a Japanese firm, based on an analysis of selection data (assessment center scores) and personnel records. They find support for an early-screening, one-stage model. Graen et al. (2006) argue that the apparent use of “a two-stage process may be a management technique to encourage competitive behavior” (p. 157), similar to contest mobility. Furthermore, they do not find an independent effect of initial promotions on upward mobility. Rather, upward mobility is determined by a combination of the first promotion and early experiences (including the relationship with the supervisor), which is similar to the conclusions of Sheridan et al. (1990). According to Graen et al. (2006), upward mobility in this setting is a combination of contest, sponsored, and tournament mobility.

Coetzee and Schreuder (2002) present a study testing the relationship between career patterns and personality types. With a sample of 125 technically oriented (predominantly male) managers of a South African company, they compared ideal career patterns (referring to the social desirability of a specific career pattern) and true career patterns (referring to individuals’ career pattern preferences based on Driver’s career concepts, 1979) for linear, expert, spiral, and transitory career patterns. They confirm the “false linear” paradox of Brousseau and Driver (1994), with 36% of the sample claiming that their ideal career pattern is “linear” whereas only 15% of the sample rated the matching (true) career pattern motives (e.g. power, competence, achievement, and recognition) most highly. Conversely, 20% of the sample rates the career pattern motives of a transitory career (e.g. variety, independence, creativity, and people) most highly although only 11% claimed this career pattern to be ideal. In a next step, Coetzee and Schreuder find support for the hypothesized relationships between career patterns and personality types which they measured using the Myers Briggs Type Indicator.

Finally, the results of an interview study among high potentials and HR managers in Belgian organizations show that high upward mobility and low inter-organizational mobility are perceived as important for the objective career success of candidates with potential for top management positions (Dries & Pepermans, 2008). Based on this study, the career patterns and mobility events of these high potentials are contrasted with those of experts and those with boundaryless careers. However, “protean” elements in terms of career self-management are mentioned as key features of high potential careers, showing that the norm or ideal for intra-organizational careers can still be characterized by fast upward mobility, but with the individual rather than the organization in charge of career development.

In summary, eleven studies published between 1979 and 2010 are reviewed that deal with the career patterns of individual managers within single organizations. In some of these studies, the data were collected among members of multiple organizations (e.g. from one industry or sector), but even then the focus is on intra-organizational careers, with an emphasis on upward mobility, showing how early mobility events shape managerial careers patterns and outcomes across different organizational and national contexts.

5.3. Set C: Career patterns of CEOs and members of top management teams (TMTs)

Wessel and Keim (1994) analyzed the career patterns of 270 college and university presidents across the U.S. Based on a survey, the authors identified two career patterns: One “academic” with 14 variations accounting for 69% of the respondents and one “administrative” with 7 variations. The specifics of this sector (i.e. higher education with strong upward mobility norms and rigid hierarchies) might limit the generalizability of their findings, but the study is an important milestone with its focus on career patterns as such. In addition to simple descriptive statistics, Wessel and Keim (1994) employ a graphical depiction of career paths.

Based on a sample with the career histories of the CEOs of the 500 largest corporations in the U.S. and the 501 largest in Europe, Hamori and Kakarika (2009) show that an external labor market strategy is negatively related to objective career success operationalized as “time to the top” needed from beginning the first job in life to the appointment as CEO. The authors argue that the “boundaryless career concept” might not be applicable to top management, while the data appear to strengthen the “tournament mobility model”. Although career patterns are not in the focus of this study, the authors present valuable data for the nature of CEO career sequences prior to their CEO role (e.g. function and industry).

Biemann and Wolf (2009) embarked on a different research strategy with TMT career patterns as the focal point of their study. They collected publicly available career histories from 166 TMT members from 42 randomly picked corporations in five countries (Denmark, Germany, Japan, U.K., U.S.) and coded each job with one out of four possible states (combinations of “always in current corporation” or not and “in home country of current corporation” or not). Employing optimal matching analysis (OMA, see the

review of papers with methodological relevance later) and cluster analysis, they derived six career patterns (average outside successor, fast track, international manager, average inside successor, highly experienced outside successor, highly experienced inside successor), correlated these with other variables, and tested for country differences. Despite this simplified coding of jobs, the study constitutes an important contribution in quantitative research of managerial career patterns.

In summary, the limited evidence presented shows that for TMT members, inter-organizational mobility is not always a good thing and may play out differently across different contexts. Most of the considerable body of research on the careers of CEOs and members of top management teams we found in our initial search however generated rather anecdotal evidence often involving interviews with fewer than 20 executives and without a focus on actual career patterns, which did not qualify for this review. The recent publication dates of two out of the three articles presented here hold promise for further research.

5.4. Set D: Career patterns of members of professional associations and other “mid-career” sources

West, Nicholson, and Rees (1990) used the traditional career notion of a vertical ladder to be climbed and concentrated on status changes in their longitudinal study among 4,000 members of a U.S. management association. Although a minority, downward status movers were presented as a relevant career pattern in addition to the idealized upward and lateral job movement in the then existing literature.

Richardson (1996) used the model of Lepine (1992, see later in the “alumni” set E) as her basis and looked at four career patterns: fast linear, slow linear, downward, and static/transitory. In her sample of 200 accounting professionals in the U.K., the majority of men fell in the first category whereas women in the latter two. Unlike in the other categories, women within the slow linear career pattern had a higher salary than men when the difference in professional experience was controlled for.

Blair-Loy (1999) used a sample of 56 executive women in finance positions in different U.S. organizations to derive career patterns using the concept of the “degree of career orderliness” of Wilensky (1961) and a combination of OMA analysis of CVs and in-depth interviews. The first two patterns show orderly progressing “corporate climbers” in large and very large firms. The third cluster contains “big fish in small and medium-sized organizations” with less orderly careers. “Movers and shakers” with the least orderly careers are in the fourth cluster. Finally, there is a career pattern with “entrepreneurs”.

Focusing as well on women’s careers and the orderliness of career patterns are O’Neil, Bilimoria, and Saatcioglu (2004) who did a survey with a convenience sample of 121 participants in MBA and executive education seminars at their U.S. university. They define career patterns as the result of the extent to which survey responses involve “ordered” and “emergent” tendencies, as measured by 7 questionnaire items. Similarly, they set a continuum of career locus from internal to external and combine the two dimensions to four career types. Unlike in the articles of Richardson and Blair-Loy, these career patterns and types may span across many occupations.

Whitmarsh, Brown, Cooper, Hawkins-Rodgers, and Wentworth (2007) chose a broader life perspective of looking at career-family patterns in their qualitative exploration of 27 professional women in the U.S., mainly in teaching or professional service roles. Three “life patterns” describing the relationship between participants’ careers and family lives were identified: “Unitrack” as a career history without the added role of motherhood; “sequential” as an initial career history followed by an interruption for a focus on the responsibilities of motherhood with a re-entry to career and the world of work; and “multi-track” as the juggling of the expectations associated with full-time employment with the responsibilities of motherhood (e.g. brief maternity leave with no break in career path).

McCabe and Savery (2007) introduced a single career pattern—“butterfly” progress—after having looked at 126 managers in the Australian convention and exhibition industry using a survey about career history data and using life and work history analysis. On a higher abstraction level, the study explains that it makes sense for individuals to “flutter inter and intra sectorally” (p. 112) in order to build up human capital that can provide a new employer organization with the “extra benefits of cross fertilization of ideas”. This concept of not following a vertical, upward progression could be “regarded as an extension and development of the boundaryless model” (p. 113). Obviously, there is a need to dig deeper to reveal different career patterns within the butterfly metaphor.

In her effort to integrate the traditional, boundaryless and protean career models, Clarke (2009) conducted explorative interviews with a diverse mid-career sample of 20 female and male managers in Australia. As they were all clients of an outplacement firm at the time of the study, they had gone through a process of reflection on their career to date and looking forward. The variables studied were career planning, job mobility, short versus long-term orientation, (self-perceived) employability, and dominant career assets (i.e. “three ways of knowing”, also see Defillippi & Arthur, 1994). Clarke identifies the following four career patterns: “Plodders” with traditional intra-organizational careers had not planned their career, were good in knowing how and knowing why, but had poor skills in the area of knowing whom and tended to be overlooked for internal promotions. The “pragmatists” were similar and had weak external networks, but had good internal networks (knowing whom) and had done some career self-management. “Visionaries” with a strong sense of knowing why and a future career orientation with active career planning and high job mobility had built up strong and marketable career assets which ensured high employability. “Opportunists” as the dominant group in the study were less planned in their career self-management and had a stronger focus on the knowing how. With their capacity for change and the desire for continuous learning and development, they understood well how the employment market operated and were aware of what they could offer to a potential employer. The latter two patterns can be related to the boundaryless career and the protean career concept respectively so that Clarke’s definition of patterns constitutes an interesting connection of the dominant career models.

A different approach was followed by Mainiero and Sullivan (2005) and Sullivan and Mainiero (2007). In their search for identification of potentially different contemporary career patterns of women and men, they followed a multi-step approach with professional women and men in the U.S. After two online surveys ($n > 100$ with high-profile women and $n = 1647$ “average” men and women), 52 in-depth interviews and an online focus group with 27 men and women, they developed the model of “kaleidoscope careers”, also as a means of understanding the “opt-out” or career interruption phenomenon. Women shift the pattern of their careers by rotating different aspects in their lives to arrange their roles and relationships in new ways. The key assumption was that careers of women are more relational. Each career action therefore is evaluated in light of the impact such decisions may have on her relationships with others. Hence, Mainiero and Sullivan (2005) proposed three central career issues as parameters that are goals or can serve as “sign posts” throughout a career: Authenticity, balance, and challenge. In Sullivan and Mainiero (2007), the authors identify two major career patterns: “Alpha” with the focus first on challenge, then on authenticity, and then on balance, which they found to be typical for the majority of men (CAB). “Beta” with the focus first on challenge, then on balance, and then on authenticity which they found to be typical for the majority of women (CBA). Despite the initial gender focus, the “Kaleidoscope model” adds an important contribution to a (necessary and) broader view on careers in a larger life course context with (societal) boundaries varying along the life cycle.

Although not presenting explicit career patterns, Hamori (2010) studies the role of labor market intermediaries for executive careers. Drawing from the database of a large multinational executive search firm, she examines a random sample of 2000 executives in the financial service sector and employs 44 in-depth interviews. There is strong evidence that executive searchers predominantly recruit candidates from large, reputable organizations and that they rather identify their candidates from job titles than based on actual accomplishments. These findings strongly indicate that “search firms simultaneously demolish and create career boundaries” (p. 56) and that future research has to take this into consideration when empirically studying managerial career patterns.

In summary, this set combines ten predominantly recent articles, only three of which were published before 2004. The empirical basis comes from a variety of different samples ranging from different professional associations (e.g. accounting, finance, and convention industry), participants of executive education seminars, the “network of non-university associates of a university”, and an outplacement firm. Empirical access at the midpoint of the participants’ careers allows for enough analysis of already experienced professional life (ex post) and both perspectives to and wishes for the future (ex ante). Due to the heterogeneity of the empirical access even within this subgroup, the underlying research questions and chosen analyses vary considerably. In many cases, “career patterns” are not the focus, but a residual finding of the article. Out of the ten, three articles concentrate entirely on women and three others have a clear initial focus on gender differences in careers. Two of the articles used interviews ($n < 30$) as empirical basis, three used surveys, and five a combination of methods, including OMA in one article. Dominant themes in career patterns identified among these mid-career samples are the level of orderliness (or stability) and the degree and direction of mobility.

5.5. Set E: Career patterns of alumni from educational institutions

Trying to find out whether women managers have specific career paths, Lepine (1992) conducted in-depth interviews with 49 female alumni of two francophone universities in Montreal (= 10% of overall population of BA's in administration) gathering factual information on their job, the characteristics of job transitions, and their own interpretations and explanations of their career history. Looking at the number of jobs held 4 and 8 years after graduation and applying content analysis, the author derived seven career patterns to be expected: Fast track, linear, lateral plus, lateral, downward, transitory, and static, with the first three being directed rather upwards accounting for 49% of the sample. Interesting as a pioneer piece of alumni research, the results are limited by the small sample size and by the strong importance of the number of jobs for the determination of the chosen career patterns.

Jepsen and Choudhuri (2001) went back to 170 alumni of three rural high schools in the U.S., thus not focusing entirely on “managerial” career patterns but using an interesting methodological approach worthwhile including. With the help of two surveys 7 and 25 years after graduation, they identified occupational career patterns (OCPs). OCPs represent the ordering across five stages (in 6-year intervals) of states (work positions). 88 career patterns were clustered into 3 groups accounting for 66% of the sample. The first (37%) consists of “stable” career patterns with no change of occupation (realistic, investigative, artistic, social, enterprising, and conventional). The second (15%) with “exploratory” career patterns collects those with one job change only, the third (14%) with “advancing” career patterns those that had an “enterprising” occupation (with usually supervisory capacities) at the last two data points. Overall, alumni with “changing” career patterns (“exploratory” plus “advancing”) were more satisfied with their last job than those with “stable” career patterns.

Reitman and Schneer (2003, 2005) used their access to U.S. business school graduates to test conceptualizations from career theory. In Reitman and Schneer (2003), they conducted three survey waves up to 1997 with 116 MBAs graduating from one U.S. university between 1976 and 1980 and correlated data on career paths with income, family structure, and career satisfaction. They identified three career patterns: A “promised path” with continuous employment by the same organization (34%), a “protean path” with full-time work always, but for multiple organizations (38%), and an “alternate path” with respondents having had phases of self-employment, part-time employment and no employment (28%). No significant difference in career outcomes (e.g. income) and career attitudes was found between the first and the second career pattern. The third was excluded from further analyses which constitute a major limitation of this study, since the career paths of self-employed MBAs would potentially modify the cluster(s) of the “protean path”.

Reitman and Schneer (2005) focus on the impact of career interruptions only and identify no explicit career patterns. Still, it can be concluded that the role of an employment gap (at least one month unemployed) for career development will have to be conceptually integrated into future research on career patterns. In this longitudinal study with 514 MBAs from two U.S. universities (1975–1980) and three waves with questionnaires, it was found that less than half of the respondents had uninterrupted work histories, and that the hypothesis of an income penalty and negative satisfaction impact of an employment gap was confirmed, especially for men.

In summary, all five articles of this set use alumni databases from different educational institutions (high schools, college, business schools) in the U.S. Alumni from certain graduation years in the past are surveyed in later years to gain insight into their careers to date. Unlike in TMT studies, career patterns of the “full” graduate population are taken into account, not only of those who make it to the top. Despite the general “alumni” label and the more or less explicit gender focus of three of the articles, there is considerable and interesting diversity in terms of initial research questions, research strategies, and results. However, stable, uninterrupted, and especially upwardly mobile career patterns are the norm against which other patterns are compared, which is also evident from the labels used to distinguish the identified career patterns in these articles.

6. Review of other papers with conceptual and methodological relevance

Beyond the empirical evidence on managerial career patterns, our reading and analysis of the collected materials brought to light a number of conceptual and methodological issues which we would like to draw attention to.

6.1. Women's career patterns

As the period during which these studies were done (e.g. from 1950 to 2010) is characterized by major changes and increasing diversity on the labor market in most industrialized nations, many authors interested in career patterns anticipated and found increasing variety in career patterns. Specifically, the dramatic increase in labor force participation of women during this period has led many researchers to focus on women's careers in general and their career patterns in particular (O'Neil, Hopkins, & Bilimoria, 2007). From our review, several studies can be identified as being primarily driven by an interest in gender differences in career patterns (e.g. Mainiero & Sullivan, 2005), and four studies focus exclusively on women's careers (e.g. O'Neil et al., 2004). The general idea behind these and other more or less recent studies focusing on gender and careers is that women's career patterns are less likely than men's to resemble an uninterrupted linear career pattern, due to their typically larger share in care responsibilities compared to men (e.g. Cabrera, 2007, 2009; Houseknecht, Vaughan, & Statham, 1987). This particular research focus on women's career patterns has shed light on the need to study career patterns beyond work by including family and other life domains (see Sullivan & Baruch, 2009), for both men and women.

6.2. Narratives and career patterns

Several authors have emphasized the importance of using stories or narratives when studying careers (e.g. Cohen, 2006), including a focus on identity work or construction in studying work role or career transitions (Ibarra, 1999, 2003, Ibarra & Barbulescu, 2010; Lindgren & Wahlin, 2001). As argued by Lindgren and Wahlin (2001) and based on their empirical study of individuals who have frequently crossed organizational boundaries, “life should be seen as an ongoing process of identity construction, whereby reflection upon life episodes and the pattern of such episodes shape identities” (p. 357). While attention to (retrospective) sense- or meaning-making is becoming increasingly common in empirical studies of careers (Cohen, Duberley, & Mallon, 2004; Cohen & Mallon, 2001; Walton & Mallon, 2004), and career transitions (Duberley, Mallon, & Cohen, 2006), it is not (yet) a commonly used approach in understanding (managerial) career patterns. While Baker and Aldrich (1996) already suggested “expression of identity” as an important dimension of career patterns, no empirical research beyond their own interview data addresses this pattern dimension. Ibarra and Barbulescu's (2010) conceptualization of identity work and the relationships between narrative variables, work role transition processes, and outcomes is highly relevant for future research on managerial career patterns as well.

6.3. Measuring career patterns with OMA and visualizing career patterns

Our review of existing empirical studies on managerial career patterns points to a lack of clarity, consistency, and agreement on how to measure career patterns. Some of the studies reviewed, as well as some that we found but excluded from the review due to the nature of their sample, point to interesting and innovative methodological and analytical approaches to measuring career patterns. As an addition to the empirical papers reviewed, we find two approaches can add value when researching career patterns: “Optimal Matching Analysis” (OMA) and visualization.

Up until now, in the domain of organizational psychology and organizational behavior, careers are typically quantitatively examined with various kinds of regression analyses (e.g. work history analyses, see McCabe & Savery, 2007), which cannot describe entire career patterns with numerous job sequences for each manager in the sample. This type of analysis counts the occurrence of certain job attributes (e.g. management trainee versus direct hire into management) or approximates causal factors for single events in a career. In contrast, in the literature we reviewed, sequence analysis is regularly presented as an appropriate method

for measuring entire careers “as they are”. Different forms of sequence analyses have been developed by linguists, archeologists, psychologists, economists, and political scientists. Most famous has become the human genome project when molecular biologists determined the similarity of the DNA of different species. [Abbott \(1983, 1984, 1995\)](#) played a major role in introducing a pragmatic form of metric sequence analysis to sociological life course research when presenting OMA as an instrument for the analysis of life courses. [Abbott \(1992\)](#) called this descriptive approach of first measuring and understanding life courses (or careers) “as they are” a paradigm shift “from causes to events”. There is a significant stream of methodological literature on OMA with introductions in [Abbott and Hrycak \(1990\)](#) or [Huang, El-Khoury, Johansson, Lindroth, and Sverke \(2007\)](#). [Chan \(1995\)](#), [Abbott and Tsay \(2000\)](#), [Wu \(2000\)](#), and [Elzinga \(2003\)](#) offer more methodological depth when discussing OMA and other methods for sequence analysis. As career patterns research is faced with very similar questions, we have provided a text supplement ([Appendix A](#)) with a short summary of the single steps of OMA, its challenges, as well as the respective experiences with it in empirical research.

Since [Abbott and Hrycak \(1990\)](#) first analyzed German musicians' careers in the 18th century, OMA has been applied in a number of sociological life course studies: [Halpin and Chan \(1998\)](#) analyze Irish and British class careers from age 15 to age 35 with two large samples of 1300 and 1600. [Scherer \(2001\)](#) compares early career patterns in Great Britain and Germany with samples of more than 1000 each and introduces a simple graphical instrument (“sequence index plot”) to illustrate the relative importance of career pattern clusters. [Brzinsky-Fay \(2007\)](#) uses a similar approach to compare early career patterns in 10 European countries, whereas [Kogan \(2007\)](#) studies the (dis)similarities of employment careers of West German immigrants.

Only recently, OMA has entered empirical research in the non-sociological careers literature. Beside [Blair-Loy \(1999\)](#) and [Biemann and Wolf \(2009\)](#) from the articles in our review, there is a number of interesting studies analyzing lives and careers of Swedish women born in the 1950s holistically ([Huang & Sverke, 2007](#), [Huang et al., 2007](#), [Isaksson, Johansson, Lindroth, & Sverke, 2006](#)) as well as an industry-specific application from the film industry ([Skilton & Bravo, 2008](#)).

A different approach to measuring career patterns uses visualization, as presented by [Reitzle et al. \(2009\)](#). They asked more than 1000 German adults to relate their own lives to among other things nine possible career trajectories presented in pictograms (see [Appendix A](#) for text supplement about methodological advances). Both approaches (OMA and visualization) offer new venues for exploring career patterns in detail.

7. Analysis and synthesis of the collected evidence

7.1. The extent of the evidence

Our main finding, and answer to our first research question, is that the empirical evidence on career patterns from peer-reviewed journals in general (around 100 studies) and on managerial career patterns in particular (33 unique studies) is surprisingly limited, especially in light of the fact that the term “career patterns” is ubiquitous in the discourse on as well as recent theorizing about careers (e.g. [Sullivan & Baruch, 2009](#)). Indeed, our search generated quite a few sources where the term “career patterns” was explicitly mentioned in the title, but the body of the text did not address these patterns and/or the empirical data presented did not (or was not analyzed to) reflect actual career patterns. Conversely, some articles which do include relevant empirical evidence on managerial careers patterns only mention those career patterns as residual finding.

7.2. The appearance of career patterns

7.2.1. Appearance defined by empirical access and research approach

Our second research question concerned the actual appearance of (managerial) career patterns. To answer that question, we first looked at so-called pattern dimensions beyond time and direction, which are the typical underlying dimensions of most conceptualizations and operationalizations (e.g. [Wilensky, 1961](#)), as well as visualizations of career patterns (e.g. [Reitzle et al., 2009](#)). On the basis of the empirical studies included in the review (as well as those that were left out because they were about non-managerial career patterns) we can conclude that most of them do not explicitly distinguish other career pattern dimensions beyond time and/or direction. There is in fact no study in our review that integrates more than three dimensions. If any, the third dimension typically has to do with the span or location of the career. Thus, career patterns can be categorized as patterns inside organizations (e.g. [Graen et al., 2006](#); [Rosenbaum, 1979](#)), patterns inside or across organizations ([Blair-Loy, 1999](#)), patterns inside or across industries (e.g. [Hamori & Kakarika, 2009](#); [McCabe & Savery, 2007](#)), and patterns inside or across occupations (e.g. [Jepsen & Choudhuri, 2001](#); [Miller & Form, 1951](#)). Other, less commonly identified career pattern dimensions are patterns inside or across the work-life domain ([Huang et al., 2007](#)); patterns related to the employment relationship: full-time, part-time, self-employed (e.g. [Huang et al., 2007](#)), patterns based on orderliness: ordered or emergent (e.g. [O'Neil et al., 2004](#), [Wilensky, 1961](#)), and patterns based on duration: variable, short versus long-term, life (e.g. [Brousseau et al., 1996](#)).

As an organizing frame for our review, we used empirical access as ordering principle, which is similar to the span or location dimension of career patterns. Not only does empirical access provide a means to categorize and describe the existing evidence on (managerial) career patterns, it also influences the findings and resulting patterns depending on the perspective (e.g. prospective, longitudinal, reflective, and retrospective). Alumni careers followed over time show diverging patterns, managers undergoing outplacement typically reflect on their careers so far and where they would like to go, and CEOs and TMT members converging at the top of the hierarchy may have made their way there by various routes. Therefore, part of the answer to our second research question (what do managerial

career patterns look like?) is that where you look is what you get: empirical access has a strong influence on both the dimensions used to describe the observed career patterns as well as the emerging career patterns themselves.

Based on the empirical evidence included in our review, we can conclude that only the four studies based on population or labor force panel data present more than seven unique career patterns, whereas the remaining studies about managerial or related professional career patterns typically (if any) distinguish three to five unique career patterns. While this difference in the number of unique career patterns identified is to be expected because the population and labor force studies reflect a broader database with more natural variation, this difference may also be caused by the descriptive versus hypothesis testing or predictive nature of the studies involved. While sociologists interested in career or life course patterns present in a population aim to see and describe what is actually out there, careers researchers typically are interested in predicting or explaining (increasing) career mobility, (objective versus subjective) career success, or in understanding the influence of specific individual and organizational factors on career patterns and outcomes. In addition, careers researchers in organizational psychology or organizational behavior have been trained to make their theoretical models parsimonious and that beauty is in simplicity, which may cause natural variety to be perceived as error. Indeed, “outliers in the data are often excised, scores across individuals are summed and averaged, and non-significant results are rarely reported in literature” (Foti, Thompson, & Allgood, 2011, p. 123).

7.2.2. Crossing organizational, occupational, and other boundaries?

The empirical evidence on the degree to which managerial career patterns reflect mobility across traditional organizational boundaries is mixed and strongly depends on the research focus and empirical access of the study, which means that we cannot conclude that there is more or less inter-organizational mobility in contemporary managerial careers than before the 1990s. Indeed, some authors claim that there have been almost no changes in length of employment and mobility since the 1970s, and managers and professionals seem to be less affected by market instability than other workers (Rodrigues & Guest, 2010).

A related question refers to the degree to which inter-organizational mobility has career consequences. From our review again, the evidence is mixed, with increasing inter-organizational mobility having positive (Jepsen & Choudhuri, 2001) as well as negative effects on ultimate career attainment (Hamori & Kakarika, 2009). In a recent study comparing cohorts of business school alumni from the 1970s and 1990s, Chudzikowski (2012) finds no differences in career effects (i.e. income) of inter-organizational mobility events. In contrast, Chen et al. (2011, p. 237) offer “one of the few empirical efforts in the careers literature that supports the central premise of the boundaryless career model” by examining the career histories of 760 U.S. mid-career managers and showing that when crossing “functional, organizational, and geographical boundaries more frequently, the probability of their career advancement was increased through mid-career” (Chen et al., 2011, p. 237). However, both of these recent studies consider simple frequencies (or additions) of mobility events rather than career patterns.

The evidence collected supports the notion that inter-organizational mobility is not what distinguishes traditional from “new” careers, as organizational careers happen within single as well as multiple organizational contexts, and inter-organizational mobility may be “wholly compatible with established career trajectories and notions of career progress” (Arnold & Cohen, 2008, p. 8).

Furthermore, at least one element of a traditional organizational career remained and may even have become more impermeable than before—that of occupational specialization (Currie, Tempest, & Starkey, 2006). Occupational boundaries increasingly provide cues for the enactment of career paths, and organizations still serve as a containing social structure that produces the patterning of job sequences (Currie et al., 2006), especially for those in managerial careers. In our review of managerial career patterns, the evidence of mobility across occupational boundaries is virtually non-existent, as is the evidence on the post-corporate careers postulated by Peiperl and Baruch (1997).

In addition to occupational boundaries, executive search firms and recruitment agencies may act as further boundaries that are becoming more prominent (Hamori, 2010; King, Burke, & Pemberton, 2005). Because of the growing labor force participation of women and the consequent increase in dual earner couples, crossing boundaries across work-life domains has become more visible, but in the studies presented here these boundaries were only salient when it was the explicit focus of the study or when women are the subject of study.

Overall, our review highlights some, but not much, of the variety in career patterns suggested by Sullivan and Baruch (2009), but we simply cannot conclude from the collected empirical data reviewed that there are in fact *new* managerial career patterns (as predicted by Grzeda, 1999), nor that contemporary managerial career patterns are different from or similar to those patterns described by careers researchers prior to the 1990s. As far as managerial careers are concerned, however, the empirical evidence collected does not always reflect the new career, as managers do not always appear to have “boundaryless careers” or “protean orientations” even when researchers hypothesized that they would (e.g. Martin et al., 2000). Until 1990, career theory and empirical evidence on career patterns in general and managerial careers in particular appear to have been well aligned, but there is less fit between the dominant “new” careers discourse with its notions of non-linearity and personalized definitions of success (e.g. Buzzanell & Goldzwig, 1991) and empirical evidence on career patterns since the 1990s.

7.2.3. Upward mobility is still the norm

While acknowledging the diversity of career patterns found when reviewing empirical studies as well as the variety and creativity in the labels used to describe them, it is clear from the evidence that the norm against which most career patterns are held is upward mobility, which depending on location or empirical access can be movement inside or across organizations, industries, and occupations. In most cases, career patterns that appear different than upward mobility are labeled in negative terms such as “deviant”, “plodding”, “flat”, “plateaued”, or “interrupted”. Typically, this differentiation between an upwardly mobile pattern and

other patterns is matched by the measures of objective career success that are used in the respective studies, such as salary progression or hierarchical advancement. Even in studies included in the review that focus on new versus traditional careers, and/or the limited number of studies that include measures of subjective career success, the idea that one should maximize one's potential, strive for continuous learning and development, and aim to be satisfied about and engaged with one's career is omnipresent. Metaphors with fewer negative connotations such as "butterfly" (McCabe & Savery, 2007) and "kaleidoscope" careers (Mainiero & Sullivan, 2005) subscribe to and reproduce similar notions of upward movement.

For many contemporary managerial careers the before mentioned new boundaries appear to induce linearity. In addition to these new boundaries, organizational characteristics such as structure and growth with their matching career logics continue to contain and shape career patterns, even if actual organizations in many cases look different than they did 25 years ago due to restructuring and de-layering (Gunz, 1988).

Thus, the "traditional" career appears to be quite alive and well, especially for those in managerial and related professional careers, as organizational hierarchies with their promise of progression as well as occupational boundaries appear to be firmly in place. Neither the degree of inter-organizational mobility nor the increasingly "protean" career orientation of managers appears to affect this phenomenon.

7.3. *Methods for analyzing and measuring career patterns*

Our third and final research question concerned the way (managerial) career patterns were typically measured and analyzed. The limited number of empirical studies we found on managerial career patterns is to some extent a result of pure methodological and technical limitations. The above mentioned interest of sociologists in describing the world "as it is" may have led to their more pronounced focus on descriptive statistics that is less common in empirical research from the domains of organizational behavior and organizational psychology. Getting access to complete sequence data, theorizing about appropriate coding of job sequences, and experimenting with OMA and other methods will certainly produce new and interesting insights in details of managerial career patterns beyond anecdotal evidence. Qualitative research methods such as using narratives and story-telling are complementary in these efforts because they can help researchers to understand what really is behind the visible career patterns found and what influences managers when making choices for or against certain career moves. In any case narratives can help to develop more sophisticated and detailed coding schemes as an input for OMA.

8. Limitations

This type of literature review is never complete and never objective due to unjustified or even inexplicable choices and judgments during both the search and analysis process. Our search technique was perhaps not sophisticated enough and by excluding unpublished papers and dissertations we may have missed many interesting sources (with maybe more recent data and methods) that would have added to our understanding of managerial career patterns and may even have provided a more definite answer to the (non-) existence of the "new" career. Certainly evidence on limited inter-organizational mobility was at times more difficult to get published than evidence on the boundaryless career. Also, sources that do describe actual career patterns (and/or where career patterns are a residual finding) may sometimes not include this or similar terminology in their title, abstract, or keywords. Searching for evidence on "managerial" career patterns may have caused us to overlook evidence on post-corporate careers (Peiperl & Baruch, 1997) of (former) managers who moved between regular employment in the private sector or administrative roles in public organizations to independent consulting or entrepreneurship (in a start-up or after a management buy-out).

Another limitation is due to the fact that within our designated domain of managerial careers, empirical evidence is especially hard to come by, with personal access to detailed and accurate career information about those in top management positions beyond publicly available (and often "tuned") resumes almost impossible to obtain. We assume that public statements about careers are often polished to cover plateaus, leaves, periods of unemployment, step-back investments, or extreme career moves (e.g. Smart & Peterson, 1997), the kind of information that is perhaps much more revealing than smooth upward mobility when it comes to understanding career patterns.

A third limitation of our review is due to a characteristic of careers research: careers take time. Combined with the inherent difficult access to data on the lives and careers of managers, this may lead to an even longer time lag between the first measurement and publication than usual. Maybe there has been a rise in "new" careers out there in the last years that simply has not yet appeared in peer-reviewed journals and was thus not evident from the selected sources.

A final and inherent limitation is that we may not have been able to see true variety and non-linearity in career patterns due to the research methods employed by the studies reviewed. Following from their assumption of non-linearity of careers, Bergmann Lichtenstein and Mendenhall (2002) claim that "the number of variables needed to fully account for non-linear, mutually causal systems is far beyond the analytic capability of social science methodologies" (p. 26). Indeed, methods currently and typically used in careers research to measure career patterns are not developed enough to capture the dynamics, complexity, and variety evidenced in real careers (Higgins & Dillon, 2007), which is one of the most critical limitations to reviewing empirical evidence on managerial careers. Bergmann Lichtenstein and Mendenhall (2002) call for "triangulation (...) to account for the non-linear causality that can exist in career systems" (p. 25). OMA and narrative approaches to studying careers show promise to overcome this inherent limitation.

9. Further research and conclusion

In terms of directions for further research, we feel that the use of narratives is crucial in enhancing our understanding of the construction of careers and of the identity work involved in work role or career transitions, due to its emphasis on retrospective sense-making, and on identifying and seeing patterns. As explained by Cohen (2006) stories about careers often highlight ambiguities and uncertainties which are not obvious using other more conventional methods. In contrast, we also know that career stories may follow the blueprint of the “ideal career” pattern or the normative “success stories” often reproduced in the business world. Researchers applying a narrative approach to managerial career patterns should be aware of these phenomena.

Furthermore, we are confident that describing and clustering contemporary career patterns of managers with OMA or other analytical strategies will throw light on old research questions and allow for new and more sophisticated ones. With empirical access remaining a bottleneck, methodology and technology will be less so than in the past. Also, we are convinced that visualization can facilitate research around career patterns, both for data collection purposes (e.g. interviewing managers using drawings of career patterns), and for representing and clarifying findings of career patterns research (see Scherer, 2001, as an example of “sequence index plots” as a graphical tool). We would also recommend the use of measures of subjective career success and other intrinsic career outcomes, in addition to more traditional objective career success measures. Using such subjective measures has been put forward as crucial to the study of new careers (Sullivan & Baruch, 2009), and empirical studies of career patterns could both incorporate such measures as a possible pattern dimension, and study the (in-) voluntary trade-offs involved in maximizing objective indicators of career success versus other life satisfaction indicators.

By these means, the opportunity to chart career patterns over time will enhance our understanding of (managerial) careers. In order to achieve this goal we need “prospective, longitudinal designs, concerning both career patterns and themes”, which according to Savickas (2002, p. 384) are rare in the study of careers. In particular, it would be interesting to find out how contemporary managerial career patterns and underlying pattern dimensions are shaped by different organizational characteristics (following Gunz, 1988), to compare outcomes of such studies across time, sector, and location. In addition, it would be fascinating to analyze path dependency effects with alumni samples, i.e. the degree to which early mobility events or career sequences impact later career patterns and career attainment.

Empirical career patterns research would benefit from awareness and incorporation of other career pattern dimensions beyond time and direction, following from the empirical access of the study (domain and perspective), but especially based on the appearance of relevant dimensions from the data itself. Strunk (2009) operationalizes and measures career complexity using multiple dimensions which could translate well to the study of managerial career patterns. The career pattern dimensions as suggested by Baker and Aldrich (1996) of knowledge cumulation and expressions of identity could serve as a source of inspiration for expanding the scope of career pattern dimensions beyond time and direction.

This review has addressed the knowledge gap by showing the extent and content of empirical evidence about contemporary managerial career patterns. Our suggestions for conceptual and methodological advances hopefully provide ground for further conceptualization and empirical exploration of managerial career patterns.

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Appendix A. Supplementary materials

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¹ References marked with an asterisk indicate studies included in the literature review.

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