

The same, but different: career orientation profiles in France, Germany, Italy and Switzerland

Julian Pfrombeck

Department of Psychology, The Chinese University of Hong Kong, Hong Kong, China, and

Gudela Grote

Department of Management, Technology, and Economics, ETH Zurich, Zurich, Switzerland

Abstract

Purpose – Career orientations are a central motivational force driving people’s career goals, choices and career-related behaviors. By identifying career orientation profiles among employees from France, Germany, Italy and Switzerland, we extend our understanding of generalizable and context-dependent aspects of career orientations relevant to adaptive human resource management.

Design/methodology/approach – We used a multi-group latent class analysis to identify career orientation profiles in a sample of 4,627 employees from France, Germany, Italy and Switzerland. These countries exemplify a number of cultural and economic commonalities and differences, which allowed us to test contextual influences.

Findings – We found five distinct career orientation profiles named ambitious self-actualizer, unassuming pragmatist, loyal citizen, corporate climber and career explorer, which entail different combinations of boundaryless, protean and advancement preferences. These profiles showed distinct relations to sociodemographic characteristics and work- and career-related attitudes. Moreover, their prevalence varied across the four countries, reflecting systematic contextual influences on career orientations.

Originality/value – By identifying five meaningful and robust career orientation profiles across four countries, we reaffirm the breadth of career orientations beyond classic distinctions of “traditional” and “contemporary” careers. We also demonstrate the joint relevance of personal and contextual factors in the expression of career orientations and offer an evidence-based approach for effective career management, especially in international organizations where contextual factors create a particularly complex amalgam of career orientations.

Keywords Career orientation profiles, Protean, Boundaryless, Multi-group latent class analysis, Macro-economic context, Cultural context

Paper type Research article

Career orientations are a motivational force for career goals, decisions, and engagement in career-related behaviors (Gerber *et al.*, 2009a; Hirschi and Koen, 2021). The career literature typically distinguishes traditional and contemporary career orientations. The former are characterized by commitment to the employer, a preference for job security, and organizational career planning, and the latter by protean and boundaryless employee needs and interests, such as career self-management, a preference for job mobility, and commitment to oneself rather than to the organization (Sullivan and Baruch, 2009). Career researchers argue that technological advancements and changing organizational structures require employees to adopt more contemporary career orientations (e.g. Guan *et al.*, 2019; Hirschi and Koen, 2021). However, research has indicated that traditional career orientations and blended forms may still exist alongside more flexible and self-directed career orientations (Guan *et al.*, 2019; Li *et al.*, 2022; Rodrigues and



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Guest, 2010). Individuals seem to combine different kinds of preferences, forming meaningful career orientation *profiles* that capture a more complete image of people’s conceptualization of their own careers compared to focusing just on single components of career orientations, such as protean or boundaryless preferences (Briscoe and Hall, 2006; Gerber *et al.*, 2009a).

While much research has investigated different combinations of aspects from protean and boundaryless preferences, sometimes also referred to as proactive career orientations (Wiemik and Kostal, 2019), less attention has been paid to combinations of those orientations and a core element of traditional careers, that is vertical advancement within an organization (Gerber *et al.*, 2009a, b). We follow arguments by Gerber *et al.* (2009a, b) that our understanding of career orientations is best promoted by integrating this broader set of components into studies of career orientation profiles and extend their research on the generalizability of such profiles by examining career orientations in a cross-national sample from France, Germany, Italy, and Switzerland. We employ multi-group latent class analysis based on items that capture key aspects of boundaryless, protean, and advancement preferences and analyze the emerging career orientation profiles in terms of sociodemographic covariates (i.e. age, gender, education, organizational tenure, and employment status) and differences in important and frequently studied work and career-related attitudes (i.e. career satisfaction, affective commitment, perceived external employability). We also examine the profiles’ prevalence across the four countries in view of different macroeconomic and cultural contexts in these countries. The conceptual framework of our study is shown in Figure 1.

With this research, we make several contributions to the career literature. First, we expand existing research on career orientation typologies by examining career orientations along three distinct components of career orientations (i.e. protean, boundaryless, and advancement). Existing typologies mostly focused on boundaryless and protean preferences (Briscoe and Hall, 2006; Kuron *et al.*, 2016; Segers *et al.*, 2008, 2010). Our findings reaffirm evidence from the few studies that have included preferences in relation to career advancement (Gerber *et al.*, 2009a, b), resulting in more elaborate and differentiated career orientation profiles. Second, through adding advancement, we explicitly include more traditional career preferences, thereby contributing to a more nuanced perspective on the trend away from organizational to more self-directed forms of careers (Li *et al.*, 2022; Rodrigues and Guest, 2010). In their meta-analysis, Li *et al.* (2022) have argued that inconsistent findings regarding the outcomes of contemporary career attitudes may be explained by employees not necessarily following a fully employee-centric career path and also by working in environments where such paths are

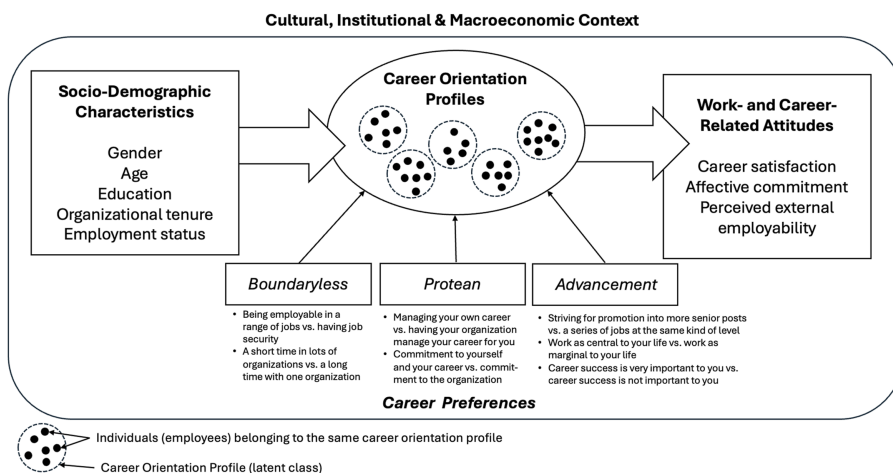


Figure 1. Conceptual framework

not rewarded. Our study provides evidence that indeed more varied combinations of traditional and contemporary career preferences exist and have consistent associations with sociodemographic characteristics and work and career-related attitudes. Third, we respond to calls for more cross-national comparative career research by examining career orientation profiles in France, Germany, Italy, and Switzerland (Hirschi and Koen, 2021; Lazarova *et al.*, 2018). The four countries are not only economically important and geographically proximal central European countries (World Bank, 2018). They also have their specific cultural, institutional, and macroeconomic context within which employees with their personal career interests and needs are embedded (Gunz *et al.*, 2011; Lazarova *et al.*, 2018; Mayrhofer *et al.*, 2007). The four countries were also chosen to extend prior work on career orientation profiles in Switzerland (Gerber *et al.*, 2009b), which had already been contrasted with career orientations in Great Britain (Gerber *et al.*, 2009a). Our findings extend knowledge on the generalizability of career orientations across European Latin versus Germanic cultures and associated institutional and macroeconomic differences. By showing that career orientation profiles appear to generalize, but not their prevalence, we offer practical implications for dealing with this mix of “same but different” in human resource management and career counseling.

A person-centered approach to career orientations: emerging profiles

Career orientations reflect individuals’ preferences regarding their future work life and particular career-related opportunities (Gerber *et al.*, 2009b). As such, career orientations act as a standard against which career goals, progress, and actions are (re-)evaluated and adjusted by taking personal, social, and environmental factors into consideration (Hirschi and Koen, 2021). Careers and related career orientations have often been classified as either traditional or contemporary, with seemingly mutually exclusive characteristics (Sullivan and Baruch, 2009). Traditional career elements comprise job security and loyalty toward the employer, few organizational changes, and vertical advancement as part of the career management by the organization. Especially protean career paths that are self-directed and value-driven, and boundaryless career paths characterized by physical and/or psychological mobility—at the expense of job security and stability—are considered hallmarks of contemporary careers (Baruch and Vardi, 2016; Briscoe and Hall, 2006; Guest and Conway, 2004; Hall *et al.*, 2018; Sullivan and Arthur, 2006). Li *et al.* (2022) argued that a protean career orientation may be more prevalent than a boundaryless career orientation because the former is closer to the current structure of the career environment. The protean career orientation is assumed to be more compatible with the goals of both individuals and employers, allowing for growth, learning (i.e. human capital development), and work engagement within an organization (Li *et al.*, 2022; Wiernik and Kostal, 2019).

However, many authors have also argued that rather than separately studying protean and boundaryless preferences, people’s career orientation *profiles* should be examined (Briscoe and Hall, 2006; Gerber *et al.*, 2009b; Spurk *et al.*, 2020). Profiles are person-centered and reveal which combinations of career preferences exist. A person-centered approach enables the identification of subpopulations of employees based on distinct configurations of a set of variables and thereby also permits the consideration of the joint effect of variable combinations (Gillet *et al.*, 2018). When applied to career orientations, this approach helps to capture the amalgam of a person’s needs, interests, and goals, and their specific effects, which is relevant to vocational research and career counseling as a basis for tailored career recommendations (Bazine *et al.*, 2023; Kuron *et al.*, 2016; Spurk *et al.*, 2020). For instance, Briscoe and Hall (2006) hypothesized a typology with eight profiles based on what they considered more likely combinations of different aspects of boundaryless and protean career preferences.

The many studies inspired by Briscoe and Hall’s (2006) work—including studies in the four countries we chose—usually find profiles that reflect the classic distinction between a traditional career orientation profile (i.e. low on protean and boundaryless preferences), and a

contemporary career orientation profile (i.e. high on protean and boundaryless preferences). However, there is also evidence for profiles that comprise various mixtures of high and low protean and boundaryless preferences, pointing to the existence of profiles that blend traditional and contemporary characteristics (e.g. Çakmak-Otluoğlu, 2018; Dany, 2003; Gerber *et al.*, 2009a; Gerber *et al.*, 2009b; Guest and Conway, 2004; King, 2003; Kuron *et al.*, 2016; Mayrhofer *et al.*, 2005; Presti, 2011; Pretto and Gaio, 2012; Rosenstiel and Nerdinger, 2000; Segers *et al.*, 2008, 2010). The additional consideration of people's preferences concerning career advancement has brought further refinement to the career orientation literature (Gerber *et al.*, 2009a, b; Guest and Conway, 2004). By explicitly studying individuals' interest in being promoted along a classical career ladder in combination with their protean and boundaryless inclination, evidence has been provided that advancement is not *per se* a component of traditional career preferences. Both more traditional versus contemporary career orientation profiles may exist with an additional stronger or weaker preference for advancement, which have been shown to be fairly generalizable across two rather diverse national contexts (Switzerland and Great Britain) (Gerber *et al.*, 2009a, b).

This discussion leads us to hypothesize that meaningful and generalizable career orientation profiles based on different combinations of protean, boundaryless, and advancement preferences can be found in even broader cross-national samples. We have no grounds for assuming that certain combinations are more likely than others, but simply hypothesize that all three kinds of preferences are relevant and contribute to creating distinct career orientation profiles.

- H1. Subpopulations of individuals exist in France, Germany, Italy, and Switzerland that are characterized by distinct career orientation profiles containing specific combinations of boundaryless, protean, and advancement preferences.

To further examine the specific relevance of different combinations of career preferences as captured by the hypothesized career orientation profiles, we derived hypotheses on how different profiles should be related to sociodemographic characteristics and to work- and career-related attitudes. When developing these hypotheses, we also drew on key aspects of protean, boundaryless, and advancement preferences rather than just the more abstract concepts underlying these preferences. Specifically, we considered employability, job security, and career paths within and across organizations as part of boundaryless preferences, career management by and commitment to oneself or the organization as part of protean preferences, and striving for hierarchical or horizontal career moves and importance of work and having a career as part of advancement preferences. However, in order not to overcomplicate the hypotheses, we state them in terms of the three overarching components of career orientations, that is, protean, boundaryless, and advancement preferences.

Career orientation profiles and sociodemographic characteristics

Gender (and Part-Time Employment). Despite significant advancements toward gender equality, traditional gender roles are still widespread. On average, women adjust their careers to family needs more often than men (Eagly and Carli, 2007; Parker, 2015). Therefore, women are more likely to find themselves constrained to seek a career that preserves enough personal resources to be able to meet demands related to family responsibilities. Accordingly, women may relinquish ambitions to climb the career ladder and follow a career characterized by stability and few job changes requiring fewer resources. At the same time, women may have to engage more in self-directed career management to find an optimal way to juggle work and family demands and reach a better work-life balance, which expresses a protean career orientation (Direnzo *et al.*, 2015; Rodrigues *et al.*, 2015, 2019). Accordingly, women should be more likely than men to express a particular mix of traditional and contemporary preferences combining low boundaryless and advancement intentions with high proteanness. Additionally, and independent of gender, we assume that part-time employment would be more likely for

individuals with such a combination of career preferences due to the high relevance of balancing work and family, which is easier with lower employment percentages.

- H2. Female and part-time employees are more likely to exhibit career orientation profiles that combine comparatively weaker advancement and boundaryless preferences and stronger protean preferences.

Age and Organizational Tenure. As protean and boundaryless career preferences change over career stages (Kostal and Wiernik, 2017), employees of different ages and organizational tenure are likely to adopt different career orientation profiles. Research on age-related changes in growth motives has shown a general decline over the lifespan (Kanfer and Ackerman, 2004; Kooij and Van De Voorde, 2011), indicating a lower desire for career advancement, crossing boundaries, and proactively managing one's career. In support of this, prior studies found negative links between age, protean, and boundaryless career orientations (Rodrigues et al., 2015, 2019). In addition, research suggests that younger cohorts are less loyal to organizations and more interested in purposeful jobs and personal fulfillment (Ng et al., 2010). Overall, these findings appear to indicate that older employees and employees with longer organizational tenure have reduced interests and needs to actively foster their career in whichever direction, expressed in lower protean preferences, but also less inclination to cross boundaries or strive for promotions.

- H3. With increasing age and organizational tenure, employees are more likely to exhibit career orientation profiles that combine comparatively weaker protean, boundaryless, and advancement preferences.

Education. Pursuing higher education requires individual resources (e.g. time and money) (Eggenberger et al., 2018). Individuals may be motivated to make these investments due to the anticipation of future returns and rewards (Direnzo et al., 2015). This motivation may be driven by intrinsic motives to find a future job that fits personal values and/or extrinsic motives to get promoted into senior positions and to receive a higher salary, indicating a preference for a protean career and vertical career advancement (De Vos and Soens, 2008; Direnzo et al., 2015). Moreover, higher education based on a college or university degree provides rather general skills compared to vocational education (Eggenberger et al., 2018). Being equipped with universal knowledge and meta-skills that may be applied in many settings facilitates career moves across organizational boundaries (Kornblum et al., 2018; Kuron et al., 2016; Li et al., 2022; Rodrigues et al., 2015). Higher education may thus promote an overall more active orientation towards one's own career, combining strong boundaryless, protean, and advancement preferences.

- H4. Highly educated employees are more likely to exhibit career orientation profiles that combine comparatively stronger boundaryless, protean, and advancement preferences.

Career orientation profiles and work- and career-related attitudes

To further establish the distinctiveness of different career orientation profiles, we develop hypotheses on their relationships with work- and career-related attitudes. We argue that individuals with different combinations of boundaryless, protean, and advancement preferences are likely to differ in their career satisfaction, affective commitment to the organization, and perceived external employability. We chose these work- and career-related attitudes for a number of reasons. Career satisfaction is an overarching measure of subjective career success that can also be considered as an indication of a (mis)fit between individuals' career preferences and their current work environment (Li et al., 2022; Wang and Wanberg, 2017). Affective organizational commitment is a key variable for assessing employees' readiness to contribute to their employer's goals, which allows for the analysis of different career orientation profiles in terms of likely benefits for organizations (Li et al., 2022; Meyer

et al., 1989). Lastly, we included perceived external employability because this construct is at the heart of debates about traditional versus contemporary careers due to the general assumption that job security belongs to the past and every employee needs to be ready at any point in time to find new employment (Fugate *et al.*, 2004). Many more outcomes could be considered (e.g. Li *et al.*, 2022; Wiernik and Kostal, 2019). We would argue, however, that we captured particularly important ones, having to be selective for pragmatic reasons, also to keep our survey instrument at an acceptable length.

Career satisfaction. Career satisfaction has been defined as the cognitive and affective evaluation of one's accomplishments and overall satisfaction with one's career (Judge *et al.*, 1995). Protean and advancement-oriented employees begin early on to engage in career planning to effectively achieve their career goals (De Vos and Soens, 2008; Herrmann *et al.*, 2015). Combined with a weak boundaryless preference, these employees may seek stability and remain in the organization for a longer period, which enables them to build up substantial human and social capital necessary for career advancement in their organization (Verbruggen, 2012). Meta-analytic results have consistently shown a positive relation between career satisfaction and a protean career orientation and a negative relation with a high mobility orientation (Li *et al.*, 2022; Wiernik and Kostal, 2019). Reflecting on their past career is likely to be most rewarding for employees with a combination of strong protean and advancement, and weak boundaryless preferences.

- H5. Individuals with career orientation profiles that combine comparatively stronger protean and advancement preferences and weaker boundaryless preferences show higher career satisfaction compared to individuals with other career orientation profiles.

Affective commitment. Affective commitment describes employees' emotional attachment to and deliberate willingness to remain with their current employer (Meyer *et al.*, 1993). A meta-analysis by Li *et al.* (2022) showed that boundaryless and protean preferences together explained 39% of the variance in commitment and that both were associated with commitment. Employees with strong boundaryless and protean preferences unite a desire for job mobility across organizational boundaries with a proactive attitude to managing their career in line with personal values, but do not necessarily wish to climb up the corporate ladder (Briscoe and Hall, 2006; Gerber *et al.*, 2009b; Sullivan and Arthur, 2006). This combination may help employees activate resources and realize job changes more easily. If this is simultaneously combined with an absence of ambitions for advancement, it may further reduce potential perceived costs tied to a job change, such as losing opportunities for eventual promotions in the organization (Hall *et al.*, 2018; Verbruggen, 2012). Thus, a combination of strong boundaryless, protean, and weak advancement preferences is likely to reduce employees' focus on their actual work and employer, undermining their commitment due to their constant outlook for opportunities elsewhere (Direnzo and Greenhaus, 2011). These considerations lead to the assumption that employees with the opposite combination of preferences, that is, weak boundaryless, weak protean, and strong advancement preferences, are likely to show the highest affective commitment. These employees aim to avoid job mobility and prefer career paths provided by the organization that promise successive promotion into more senior jobs (Gerber *et al.*, 2009b). Thus, even in the case of low alignment with their personal values, they may stay committed.

- H6. Individuals with career orientation profiles that combine comparatively weaker boundaryless and protean preferences and stronger advancement preferences show higher affective commitment compared to individuals with other career orientation profiles.

Perceived external employability. Perceived external employability is the perception of one's chances for employment in the labor market (Vanhercke *et al.*, 2014). This perception is tied to the belief that leaving the current employer does not incur significant losses (Rothwell and

Arnold, 2007) and is therefore likely to facilitate employee engagement in job mobility. Furthermore, those employees who proactively manage their careers are likely to invest in their employability (e.g. through career planning and job training) to access career opportunities matching their values and goals (De Vos and Soens, 2008). This aligns with prior findings of positive associations between protean and boundaryless career orientations with perceived employability (Rodrigues *et al.*, 2019). If combined with a preference for advancement, those employees will likely invest a lot of energy in their work and proactively seek opportunities for further skill development and learning to get promoted (Gerber *et al.*, 2009b). These career planning efforts are related to increased human and social capital, which in turn is related to higher employability (Direnzo *et al.*, 2015). Thus, we assume that the combination of strong boundaryless, protean, and advancement preferences is associated with perceptions of higher employability on the external job market.

- H7. Individuals with career orientation profiles that combine comparatively stronger boundaryless, protean, and advancement preferences show higher perceived external employability compared to individuals with other career orientation profiles.

The prevalence of career orientation profiles across countries

In accordance with career literature emphasizing the importance of contextual influences on individuals' career striving, we assume that the prevalence of career orientation profiles—if not the profiles themselves—may vary across the four countries in our study (Gunz *et al.*, 2011; Lazarova *et al.*, 2018; Mayrhofer *et al.*, 2007; Shen *et al.*, 2015). Despite their geographical proximity, substantial differences in cultural, institutional, and macroeconomic factors exist between them. Although France, Germany, Italy, and Switzerland represent highly industrialized countries with high ranks on the human development index (UNDP, 2015), they differ on the index of economic freedom (Miller and Kim, 2015) and with respect to unemployment rates, which were significantly higher in France (10.3%) and Italy (12.7%) compared to Germany (5.0%) and Switzerland (4.8%) at the time our data were collected (OECD, 2021a). Also, the strictness of employment protection (temporary/permanent contracts) was much higher in France (3.13/2.50) and Italy (2.0/2.93) than in Germany (1.13/2.60) and Switzerland (1.25/1.43) (OECD, 2021b). As job-to-job mobility tends to increase with lower unemployment and lower employment protection (Kornblum *et al.*, 2018; Rodrigues and Guest, 2010), we expect to find differences in the prevalence of career orientation profiles between countries.

With regard to cultural differences, France, Italy, and the French and Italian-speaking parts of Switzerland are ascribed to the Latin European cluster, while Germany and the German-speaking part of Switzerland are ascribed to the Germanic European cultural cluster (GLOBE, 2020). As both cultural clusters are relatively high on individualism, people may feel, in general, responsible for their careers and strive for independence (Thomas and Inkson, 2007). However, differences along the power distance and uncertainty avoidance dimensions may lead to different career preferences in the four countries (Lazarova *et al.*, 2018; Thomas and Inkson, 2007). Extant research on the influence of the institutional, economic, and cultural context (e.g. Chudzikowski *et al.*, 2012; Demel *et al.*, 2012; Lazarova *et al.*, 2018) does not permit the derivation of specific hypotheses yet. Therefore, we formulate the following research question:

- RQ. How does the prevalence of career orientation profiles differ across France, Germany, Italy, and Switzerland?

Methods

Participants and procedure

Data from 4,780 employees in France, Germany, Italy, and Switzerland were collected in 2014 online via a Swiss market research institute using existing online panels (for France, Germany,

Italy) and a randomly drawn sample from the Swiss Federal Statistical Office (Switzerland). The underlying population of this sample is defined as all individuals who are employed (excluding self-employed) for at least 40% of a full-time equivalent and between 16 and 65 years old. Based on the screening of open comment fields at the end of the survey and screening questions at the beginning regarding participants' employment percentage (if below 40%), days of work absence (if more than 200 days in the last year), or lack of response regarding whether they were employed or not, 153 participants (3%) were excluded, resulting in a final sample of 4,627 employees (1,107 France, 1,070 Germany, 1,067 Italy, 1,383 Switzerland) [1]. On average, participants (49% female) were 40.5 years old ($SD = 11.9$), and 44% completed higher vocational training or held a university degree. One-third (30%) of the participants worked part-time (i.e. less than 90% of a full-time equivalent). Participants worked in various industries (the five largest: health and social sector 14%, public administration 12%, retail 11%, manufacturing 11%, private service 9%), various occupations (the five largest: health, teaching, cultural occupations, and scientists 21%, management and administration occupations, banking and insurance and accounting occupations 19%, technical occupations and IT occupations 14%, trade and transport occupations 13%, and production occupations in industry and trade (excluding construction) 11%), and the average organizational tenure was 11.1 years ($SD = 13.1$) [2].

Measures

Unless otherwise stated, participants answered on five-point Likert-type scales ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Participants could choose between French, German, or Italian survey versions. We used existing French, German, and Italian language versions of the measures for which translation equivalence was established through a translation back-translation procedure (Doden *et al.*, 2018; Grote and Staffebach, 2012).

Demographic characteristics. Participants were asked to indicate their year of birth, which we used to calculate their age. For gender, participants could only choose between male and female or decline to answer. Organizational tenure was measured in years ("For how many years have you already been working for your current employer?"). Education was measured with an 8-point scale in Switzerland and with a 7-point scale in France, Germany, and Italy. We merged these two into a binary measure, differentiating between whether participants had completed a university or higher vocational education degree (coded as "1") or not (coded as "0"). If participants worked for 90% of a full-time equivalent or above, the variable for full-time was coded as "1" and if participants worked less than 90% of a full-time equivalent, it was coded as "0".

Career orientations. We measured career orientations with seven items from Guest and Conway's (2004) original 9-item career orientation scale measure. Employees were asked, "Looking ahead at your work life, which of the following would you choose?" and had to decide between two opposing statements on a 4-point scale. The item anchors for boundaryless preferences were "being employable in a range of jobs" vs. "having job security" and "a short time in lots of organizations" vs. "a long time with one organization." The item anchors for protean preferences were "managing your own career" vs. "having your organization manage your career for you" and "commitment to yourself and your career" vs. "commitment to the organization." Finally, three items measured advancement preferences with the following anchors: "striving for promotion into more senior posts" vs. "a series of jobs at the same kind of level", "work as central to your life" vs. "work as marginal to your life", and "career success is very important to you" vs. "career success is not important to you". The original scale also included two items measuring a general present versus future time orientation without reference to the work or career context, which we did not use in our analyses [3].

We followed previous research (e.g. Doden *et al.*, 2018; Tschopp *et al.*, 2016) and dichotomized the 4-point scale to a binary scale by coding a tendency to the left response option (either 1 or 2) as 1 and coding a tendency to the right response option (either 3 or 4) as 2. The original format used by Gerber *et al.* (2009a, b) and Guest and Conway (2004) was a

dichotomous scale with a forced choice between the two contrasting statements. In the later version, which was used in our study, the measure was extended to a four-point scale, but only to allow respondents some decision latitude, while keeping the underlying forced-choice format by subsequently dichotomizing the responses (Dodan et al., 2018; Tschopp et al., 2016). The dichotomization reduces noise around tendencies toward one of two qualitatively alternative career preference options.

Affective commitment. We measured affective commitment with three items adapted from Meyer et al. (1993): “I feel ‘emotionally attached’ to this organization,” “I feel like ‘part of the family’ at my organization,” and “I feel a strong sense of ‘belonging’ to my organization” ($\alpha = 0.90$).

Perceived employability. We measured perceived employability with the three-item scale from Janssens et al. (2003), e.g. “I’m confident that I would find another job if I started searching” ($\alpha = 0.73$).

Career satisfaction. We measured career satisfaction with three items from Greenhaus et al. (1990). The items were “I am satisfied with the success I have achieved in my career,” “I am satisfied with the progress I have made toward meeting my overall career goals,” and “I am satisfied with the progress I have made toward meeting my goals for advancement” ($\alpha = 0.93$).

Analytical strategy

To identify career orientation profiles, we performed an exploratory latent class analysis (LCA) in LatentGold version 5.1 with an integrated full information maximum likelihood estimation to model missing values (Vermunt and Magidson, 2005). The LCA was conducted at the item-level based on the seven dichotomized career orientation items [4]. Across the seven career orientation items, the LCA examines whether individuals demonstrate similar response patterns regarding the two alternative response options. Individuals with similar response patterns are grouped together into a latent class. These latent classes represent career orientation profiles in our case and the number and nature of these classes (i.e. career orientation profiles) are *a priori* unknown. Based on individuals’ class membership (i.e. career orientation profile), a probability with which they tend to choose one of the two alternative response options can be assigned. Because these probabilities depend on their class membership (i.e. career orientation profile), these response probabilities are called conditional response probabilities. These conditional response probabilities provide the basis for the interpretation of career orientation profiles.

To account for the multi-level structure in our data, as individuals are nested in different countries, we performed a multi-group LCA. The higher-order groups in the multi-group LCA represent the four countries and the lower-order groups or classes represent the *a priori* unknown number and nature of career orientation profiles. A multi-group LCA serves the purpose of comparing models with different assumptions that are akin to measurement invariance testing in a classic factor-analytic framework (Kankaraš et al., 2011). Structurally heterogeneous models have country-specific intercept and slope parameters. In partially homogeneous models, slope parameters are set equal across countries, but intercept parameters are country-specific. In both structurally heterogeneous and partially homogeneous models, the identified career orientation profiles are country-specific and cannot be compared. In structurally homogeneous models, both intercept and slope parameters are set equal across countries. This means that the identified career orientation profiles are not country-specific—they are the same across countries, though the prevalence of each career orientation profile can still vary across countries (Kankaraš et al., 2011). The idea of a structurally homogeneous model corresponds to scalar invariance in a classic factor-analytic framework (Kankaraš et al., 2011).

We followed best practice recommendations to determine the best multi-group LCA solution by applying a triangulated approach and a random sample split (Morin et al., 2016; Schmiege et al., 2017; Spurk et al., 2020). First, we calculated a series of multi-group LCAs

within each subsample to find the best multi-group LCA solution for each. We ran multi-group LCAs with two to seven classes for each configuration (i.e. structurally heterogeneous, partially homogeneous, and structurally homogeneous). To choose the best fitting and most parsimonious model, we primarily used the Bayesian information criterion (BIC) and the Consistent Akaike Information Criterion (CAIC), following recommendations as they were found to be particularly effective for large sample sizes like in our case (Nylund *et al.*, 2007). Due to their similarity, differences in both BIC and CAIC values larger than 10 can be interpreted as indicating strong evidence that one model is superior over the other, whereas differences between 6 and 10 indicate moderate evidence, and differences in BIC/CAIC values below 6 can be interpreted as negligible differences and the simpler model should be chosen (Raftery, 1995; Vermunt and Magidson, 2005). In addition, we triangulated our judgment by checking entropy values, bootstrapped likelihood ratio tests, Vuong tests for comparing nonnested models (Merkle *et al.*, 2016), and theoretical considerations and interpretability in each subsample. Second, we compared the solutions across subsamples. This cross-validation step ensures that we ultimately choose a robust and replicable solution. After conducting the multi-group LCA to identify the best fitting and robust model, we used multinomial logistic regression analysis to examine sociodemographic predictors and examined mean difference comparisons in continuous dependent variables (Bakk *et al.*, 2013; Morin *et al.*, 2016).

Results

Preliminary analyses

To establish the distinctiveness of our study variables, we first performed a series of confirmatory factor analyses (CFAs). The model fit of the six-factor model (i.e. a separate factor for proteanness, boundarylessness, advancement, career satisfaction, employability, and affective commitment) demonstrated a good model fit ($\chi^2(75) = 963.04$, CFI = 0.967, TLI = 0.953, RMSEA = 0.051, SRMR = 0.052). Next, we compared this model to a series of other models, including a 5-factor model in which the items for boundaryless and affective commitment were loaded onto one factor, a 5-factor model in which the items for employability and protean loaded onto one factor, a 2-factor solution with all career orientation items and all career-related attitude items loading onto one factor, respectively, and a single-factor solution with all items loading onto one factor. As shown in Table 1, the six-factor model with separate factors for each construct yielded the best fit, supporting the distinctiveness of the study variables.

We also analyzed the measurement invariance of the career-related attitudes across the four countries. The measurement invariance analysis demonstrated scalar measurement invariance can be assumed because the model fitted the data well ($\chi^2(98) = 361.17$, CFI = 0.988, TLI = 0.986, RMSEA = 0.049, SRMR = 0.029) and the fit was not superior when relaxing equality constraints for intercepts and factor loadings as the difference in fit indices for the models of metric and configural invariance were not larger than 0.01, which is typically used as a decision criterion for assessing measurement invariance (Putnick and Bornstein, 2016). [5]

Multi-group latent class analysis to identify career orientation profiles

First, we randomly split the sample into two samples of approximately similar size (subsample 1: $n = 2,305$, subsample 2: $n = 2,322$) and conducted an exploratory multi-group LCA within each subsample. Within each subsample, we performed in total 18 different configurations of multi-group LCAs. The estimated models were heterogeneous, partially homogeneous, and structurally homogeneous multi-group models with two to seven classes (the detailed numerical results for all models can be found in Table S1 for subsample 1 and Table S2 for subsample 2 in the supplemental information document). The BIC values are visualized in “elbow plots” in Figure 2 for both subsamples. The point after which the slope flattens is an indicator of the optimal number of profiles in the data (Morin *et al.*, 2016).

Table 1. Results of confirmatory factor analyses

Model	χ^2	<i>df</i>	$\Delta\chi^2$	CFI	TFL	RMSEA	SRMR
Six-factor model ^a	963.04	75		0.967	0.953	0.051	0.052
Five-factor model ^b	1725.48	80	762.44***	0.938	0.919	0.068	0.063
Five-factor model ^c	1620.59	80	657.56***	0.942	0.943	0.065	0.067
Two-factor model ^d	11912.45	89	10949.41***	0.557	0.477	0.172	0.127
One-factor model ^e	12531.16	90	11568.12***	0.534	0.456	0.175	0.124

Note(s): *N* = 4627. χ^2 = chi-square, *df* = degrees of freedom, $\Delta\chi^2$ = difference in χ^2 values between the respective model and the six-factor model, CFI = comparative fit index, TLI = Tucker–Lewis Index, RMSEA = root mean square error of approximation, SRMR = Standardized Root Mean Square Residual, **p* < 0.05; ***p* < 0.01; ****p* < 0.001 (two-tailed), ^aModel with six separate factors for boundaryless, protean, advancement, career satisfaction, employability, and affective commitment., ^bModel with five factors; items for boundaryless and affective commitment load onto one factor., ^cModel with five factors; items for protean and employability load onto one factor., ^dModel with two factors; all career orientation items and all career-related attitude items load onto one factor, respectively., ^eAll items loading onto one factor.

For subsample 1, the elbow plot shows that the BIC values drop by adding additional classes and flatten between 4-class and 5-class solutions for heterogeneous, partially homogeneous, and structurally homogeneous configurations. Among all the models, the heterogeneous 4-class, the heterogeneous 5-class, and the structurally homogeneous 5-class solutions had the lowest BIC and CAIC values, with differences on both indices below 10. To find the best model among these three solutions, we needed to evaluate additional indicators and tests, such as the entropy and the bootstrapped likelihood ratio test (BLRT). The entropy values were relatively similar among the three models (between 0.57 for the heterogeneous 4-class solution and 0.59 for the structurally homogeneous 5-class solution). Next, we checked the result of the BLRT, comparing nested models. The test of the 4-class vs. 5-class heterogeneous solution was significant ($\Delta 2LL = 86.56, p < 0.001$), indicating that the 5-class heterogeneous solution statistically fit the data better. However, it is important to note that the BLRT was consistently significant across all tested models (see [Tables S1 and S2](#)). Although the BLRT is generally less sensitive to sample size than other tests ([Nylund et al., 2007](#)), based on these results, it seems that due to our large sample (*N* > 2,000) the test is ineffective in differentiating model fit because it detects even small differences that are theoretically not necessarily meaningful and using it could lead to overfitting. Finally, we conducted a Vuong test for a comparison between the 4-class heterogeneous and the 5-class structurally homogeneous solution because this test is also applicable for non-nested models ([Merkle et al., 2016](#); [Vuong, 1989](#)). The Vuong test was not significant ($\Delta 2LL = 25.36, p = 0.627$), indicating that both models statistically fit the data equally well and the more parsimonious model should be chosen, which is the 5-class structurally homogeneous solution. Indeed, [Kankaraš et al. \(2011\)](#) highlighted the possibility that some latent classes may be observed in all countries, whereas other latent classes are country-specific. In that case, the authors recommend comparing the fit of a heterogeneous solution with *k* classes with a structurally homogeneous solution with *k*+1 classes. If the structurally homogeneous solution with *k*+1 classes fits the data equally well or even better, this indicates that the additional class has accounted for a substantial part of the inequivalence encountered in the *k*-class heterogeneous solution. This also seems to be the case in subsample 1. Overall, the series of tests speaks in favor of the 5-class structurally homogeneous solution as the best model in subsample 1.

In subsample 2, the 4-class heterogeneous model and the 5-class homogeneous model had the lowest BIC and CAIC values ($\Delta BIC = 1.53, \Delta CAIC = 2.47$), indicating negligible differences based on these two fit indices. Entropy values were also very similar (0.62 for the heterogeneous 4-class model and 0.61 for the 5-class structurally homogeneous solution). The BLRT test is not suitable for comparing the models because they are not nested. So, we

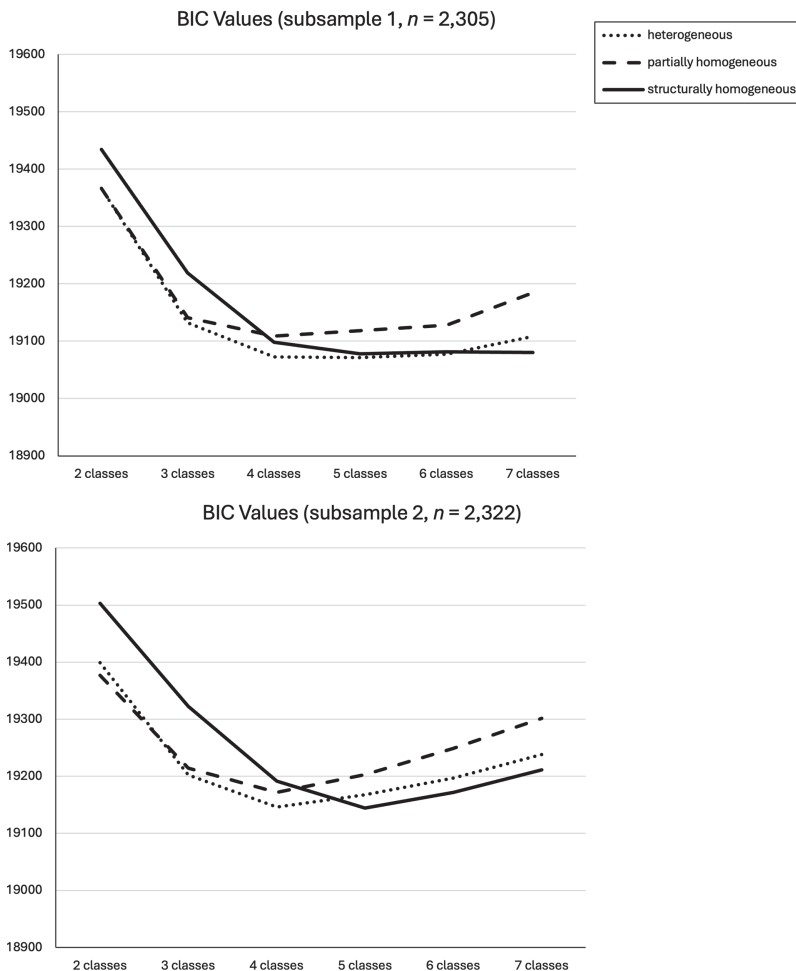


Figure 2. Elbow graphs based on BIC values for subsample 1 and subsample 2

performed the Vuong test to compare these two non-nested models. The Vuong test was not significant ($\Delta 2LL = 32.53, p = 0.997$), indicating that both models fit the data equally well. Based on the principle of parsimony and in favor of enabling meaningful cross-country comparisons, the 5-class structurally homogeneous solution can thus be considered the best model solution within subsample 2.

Finally, we compared models across both subsamples. First, we compared the 5-class structurally homogeneous solutions, which were identified as the best model in both subsamples. An inspection of the career orientation profiles demonstrated that the same types of career orientation profiles could be identified in subsamples 1 and 2 because the conditional response patterns of the five structurally homogeneous career orientation profiles were highly similar, demonstrating almost complete overlap. Additionally, we compared the two 4-class

heterogeneous solutions and the two 6-class homogeneous solutions from both subsamples. The comparison of the 4-class heterogeneous solutions from subsamples 1 and 2 revealed that these models were not very robust, as the career orientation profiles did not replicate. Furthermore, we compared the two 6-class structurally homogeneous solutions as the BLRT tests, comparing them with the 5-class structurally homogeneous solutions in subsamples 1 and 2, respectively, were significant (see [Tables S1 and S2](#)). An inspection of the career orientation profiles showed that the profiles were partly qualitatively different. Thus, the solutions with six structurally homogeneous profiles were not robust. In conclusion, the 5-class structurally homogeneous model was chosen as the best fitting and robust solution of the multi-group LCA. This means, the latent classes (i.e. career orientation profiles) and response probabilities within these career orientation profiles were equivalent across the four countries.

Based on the 5-class structurally homogenous solution in subsample 2, individuals of subsample 1 were then assigned to the career orientation profiles by means of a confirmatory multi-group LCA. Next, we calculated the average assignment probabilities in the merged sample. As shown in [Table 2](#), average assignment probabilities to classes (i.e. career orientation profiles) were above the threshold of 0.70 for all classes, indicating that most cases could be appropriately and unambiguously assigned to a career orientation profile ([Spurk et al., 2020](#)), which corroborates that our identified solution fits the data well. Finally, we performed paired comparisons to test whether the response probabilities for the career orientation items are significantly different between the clusters. The results demonstrated that most paired comparisons were statistically significant, indicating that each item meaningfully contributed to the distinguishability between career orientation profiles (the detailed results are reported in the [supplemental information](#)).

Interpretation of career orientation profiles

We interpreted the five career orientation profiles based on their response profiles ([Figure 3](#)). Members of the largest profile ($n = 1,138, 24.6\%$) showed a strong advancement preference as they were striving for promotions and career success, and work was central to their lives. They preferred career self-management and were committed to their own career rather than to their employer, revealing a high protean preference. The conditional response probabilities for the boundaryless items, being employable in a range of jobs and a short time in lots of organizations, were rather low. We thus labeled this profile the *ambitious self-actualizer* who seeks career success through advancement and personal fulfillment. The second largest career orientation profile ($n = 1,114, 24.1\%$) was characterized by a preference for career advancement, job security, a long time in one organization, and commitment to the

Table 2. Distribution of career orientation profiles in each of the four countries (in %)

Career orientation profiles	Ambitious self-actualizer	Corporate climber	Career explorer	Unassuming pragmatist	Loyal citizen
N	1,138	1,114	967	817	591
Overall (%)	24.6	24.1	20.9	17.7	12.8
Average assignment probability (SD)	0.77 (0.17)	0.76 (0.17)	0.77 (0.19)	0.78 (0.18)	0.76 (0.16)
France	16.9	22.0	27.6	26.6	<u>6.9</u>
Germany	16.9	28.0	30.5	19.3	<u>5.3</u>
Italy	17.5	29.4	25.8	21.5	<u>5.8</u>
Switzerland	42.2	18.5	<u>4.3</u>	6.4	<u>28.6</u>

Note(s): The largest group in each country is highlighted in italic and the smallest group in each country is highlighted in underlined

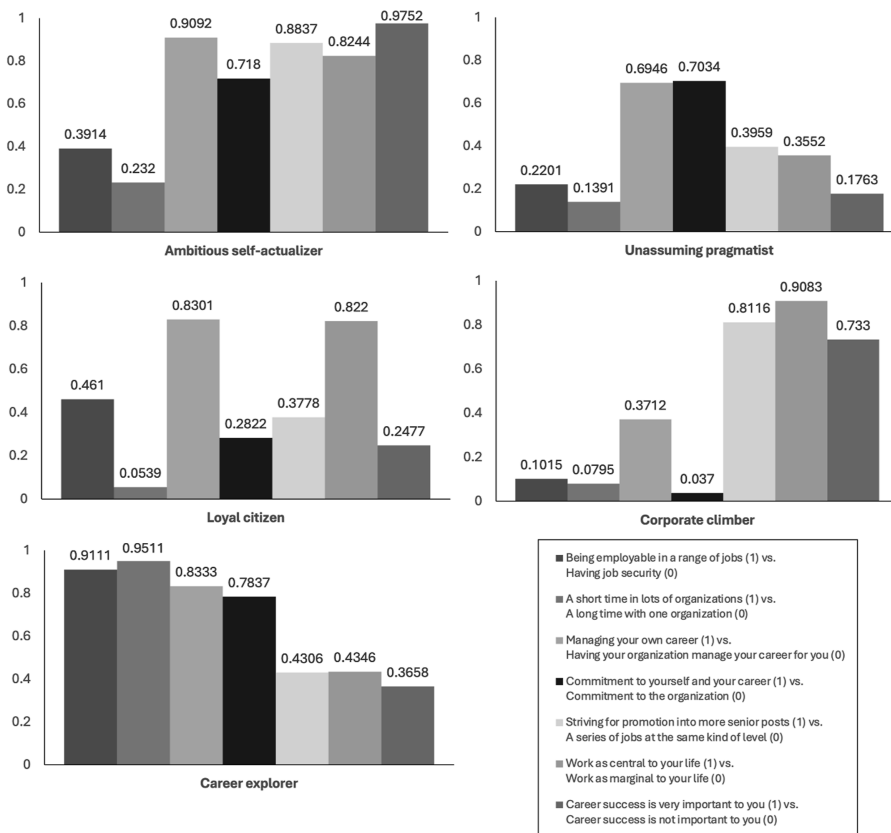


Figure 3. Conditional response probabilities of identified career orientation profiles

organization. Employees of this profile preferred organizational instead of self-directed career management. We thus labeled this profile the *corporate climber*, who is committed to climbing up the corporate ladder and prefers clearly defined career paths provided by the organization. The third profile ($n = 967$, 20.9%) was characterized by high levels of career self-management, commitment to oneself and one's career, gaining high employability in a range of jobs, and preferring a short time in lots of organizations. Career advancement was moderately important. We labeled this profile the *career explorer*, who prioritizes experiences in different kinds of jobs and organizations and is highly agentic toward one's own career management, even at the expense of career advancement. The fourth profile ($n = 817$, 17.7%) was characterized by high response probabilities for career self-management and commitment to one's own career. At the same time, these employees preferred spending a long time in one organization and job security, and the desire for career success and promotions, and work centrality were low. We labeled this career orientation profile the *unassuming pragmatist* who is committed to and actively manages their own career, but also values job security and a long employment relationship without the ambition to get promoted. The fifth profile ($n = 591$, 12.8%) was characterized by a low importance of being promoted into more senior jobs. However, work itself was very central to their life, and they were more committed to their organization than to their career and sought to stay there for a long time. Being employable in a range of different jobs was moderately and career self-management was highly important. We

labeled this profile the *loyal citizen* who is dedicated, dutiful, and loyal toward the employer, while simultaneously seeking new job experiences without striving for advancement.

Test of hypotheses

In [Hypothesis 1](#), we predicted that individuals in France, Germany, Italy, and Switzerland can be grouped into several career orientation profiles that are the same across countries and based on distinct patterns of higher or lower relevance of boundarylessness, proteanness, and advancement for their desired career paths. In line with our hypothesis, the results of the multi-group LCA indicated that the same career orientation profiles existed in the four countries. To examine the distinct patterns of career profiles, we aggregated and categorized the conditional response probabilities for boundaryless, protean, and advancement preferences into high, moderate, and low in [Table 3](#). As can be seen, each of the five identified career orientation profiles is characterized by distinct and unique expressions of these preferences. Hence, we conclude that [Hypothesis 1](#) was supported.

Next, we examined whether sociodemographic characteristics (i.e. age, gender, education, organizational tenure, employment status) predict the affiliation with a career orientation profile using multinomial logistic regression (see [Table 4](#)). The odds ratios (OR) reflect the change in the likelihood of membership in one career orientation profile versus a comparison profile for each unit of increase in the predictor. ORs under (above) 1 suggest that the likelihood of membership in the target profile is reduced (increased). [Hypothesis 2](#) predicted that female and part-time employees are more likely to belong to career orientation profiles that combine comparatively weaker advancement and boundaryless preferences and stronger protean preferences. This career orientation profile corresponds with the unassuming pragmatist. In line with [Hypothesis 2](#), gender (i.e. being female) increased the likelihood of being an unassuming pragmatist compared to all other career orientation profiles except the career explorer (see [Table 4](#)). Full-time versus part-time employment effectively predicted belonging to the loyal citizen compared to all other profiles, except the unassuming pragmatist. The loyal citizen had the highest part-time working rate. Thus, [Hypothesis 2](#) was partially supported.

The career orientation profile with comparatively weaker protean, boundaryless, and advancement preferences, described in [Hypothesis 3](#), corresponds to the loyal citizen. As predicted, a higher age significantly predicted the likelihood of belonging to the loyal citizen career orientation profile. However, higher organizational tenure did not. Thus, [Hypothesis 3](#) was also partially supported. The career orientation profile described in [Hypothesis 4](#) has comparatively stronger boundaryless, protean, and advancement preferences which corresponds to the career explorer. However, education level did not significantly predict the likelihood of belonging to any career orientation profile; thus, we did not find support for [Hypothesis 4](#).

[Hypotheses 5 to 7](#) predicted the association of career orientation profiles with career satisfaction, affective commitment, and perceived external employability. The results are presented in [Table 5](#). The profile described in [Hypothesis 5](#) matches the ambitious self-actualizer. The ambitious self-actualizer reported higher career satisfaction compared to the career explorer and unassuming pragmatist. However, it was not significantly different from

Table 3. Overview of career orientation profiles

Career orientation profiles	Ambitious self-actualizer	Corporate climber	Career explorer	Unassuming pragmatist	Loyal citizen
Boundaryless	Weak	Weak	Strong	Weak	Weak
Protean	Strong	Weak	Strong	Strong	Moderate
Advancement	Strong	Strong	Moderate	Weak	Moderate

Table 4. Results from the multinomial logistic regression evaluating the effects of sociodemographic characteristics on latent career orientation profile memberships

	Corporate climber vs. Ambitious self-actualizer		Career explorer vs. Ambitious self-actualizer		Unassuming pragmatist vs. Ambitious self-actualizer		Loyal citizen vs. Ambitious self-actualizer		Corporate climber vs. Loyal citizen	
	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>
Demographics										
Age	-0.017 (0.005) ***	0.984	0.001 (0.005)	1.001	0.008 (0.005)	1.008	0.025 (0.006) ***	1.025	-0.041 (0.006) ***	0.960
Gender (Female)	-0.033 (0.094)	0.968	0.085 (0.099)	1.089	0.230 (0.105) *	1.258	-0.055 (0.116)	0.947	0.022 (0.117)	1.022
Education (Without a degree)	-0.072 (0.092)	0.930	0.089 (0.097)	1.093	-0.091 (0.102)	0.913	0.069 (0.112)	1.072	-0.142 (0.113)	0.868
Organizational Tenure	0.011 (0.006)	1.011	0.019 (0.006) **	1.020	0.013 (0.006) *	1.013	0.003 (0.007)	1.003	0.008 (0.007)	1.008
Employment Status (Non-full-time)	-0.142 (0.109)	0.868	0.063 (0.112)	1.065	0.073 (0.118)	1.076	0.618 (0.123) ***	1.855	-0.759 (0.126) ***	0.468
Demographics										
	Career explorer vs. Loyal citizen		Unassuming pragmatist vs. Loyal citizen		Corporate climber vs. Unassuming pragmatist		Career explorer vs. Unassuming pragmatist		Corporate climber vs. Career explorer	
	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>	<i>Coef. (SE)</i>	<i>OR</i>
Age	-0.024 (0.006) ***	0.977	-0.017 (0.006) **	0.983	-0.025 (0.005) ***	0.976	-0.007 (0.006)	0.993	-0.018 (0.005) **	0.982
Gender (Female)	0.140 (0.120)	1.150	0.284 (0.125) *	1.329	-0.262 (0.105) *	0.769	-0.145 (0.109)	0.865	-0.118 (0.100)	0.889
Education (Without a degree)	0.020 (0.116)	1.020	-0.160 (0.120)	0.852	0.019 (0.103)	1.019	0.180 (0.107)	1.198	-0.162 (0.098)	0.851
Organizational Tenure	0.016 (0.007) *	1.016	0.009 (0.007)	1.009	-0.002 (0.007)	0.998	0.007 (0.006)	1.007	-0.008 (0.006)	0.992
Employment Status (Non-full-time)	-0.555 (0.128) ***	0.574	-0.544 (0.133) ***	0.580	-0.215 (0.120)	0.807	-0.010 (0.123)	0.990	-0.205 (0.115)	0.815

Note(s): The coefficients and OR reflect the effects of participants' sociodemographic on the likelihood of membership into the first career orientation profile relative to the second profile. *Coef.* = coefficient; *SE* = standard error of the coefficient; *OR* = odds ratio. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 5. Means of work and career-related attitudes

Career orientation profiles Work and career-related attitudes	Ambitious self-actualizer (A)	Unassuming pragmatist (B)	Loyal citizen (C)	Corporate climber (D)	Career explorer (E)	Overall effect
Affective commitment	3.38 _{B,E}	2.99 _{all}	3.38 _{B,E}	3.42 _{B,E}	3.21 _{all}	25.17***
Perceived employability	3.35 _{B,E}	2.98 _{A,C,D}	3.26 _{B,E}	3.27 _{B,E}	2.95 _{A,C,D}	22.00***
Career satisfaction	3.69 _{B,E}	3.36 _{A,C,D}	3.71 _{B,E}	3.62 _{B,E}	3.46 _{A,C,D}	33.66***

Note(s): Subscripts designate career orientation profiles which differ significantly at $p < 0.05$
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

the career satisfaction level reported by the loyal citizen and corporate climber. Thus, [Hypothesis 5](#) was partially supported. The profile described in [Hypothesis 6](#) (strong advancement but weak protean and boundaryless preferences) fits the corporate climber. In line with [Hypothesis 6](#), the corporate climber showed the highest affective commitment. It was significantly higher than the affective commitment of the career explorer and the unassuming pragmatist. However, because the affective commitment level was not significantly different between the corporate climber, the ambitious self-actualizer, and the loyal citizen, we conclude that [Hypothesis 6](#) was only partially supported (see [Table 5](#)). Finally, [Hypothesis 7](#) was not supported because the career explorer (with comparatively stronger boundaryless, protean, and advancement preferences) was not the career orientation profile with the highest perceived external employability. Together with the unassuming pragmatist, the career explorer perceived lower external employability compared to the other three career orientation profiles.

Finally, we examined the distributional differences in the career orientation profiles between countries (see [Table 2](#)). A chi-square difference test indicated that the prevalence of career orientation profiles was different across France, Germany, Italy, and Switzerland ($\chi^2 = 1100.80$, $df = 12$, $p < 0.001$, $N = 4,627$). The ambitious self-actualizer was the most frequent profile overall, but within the countries, it was most frequent in Switzerland (42.2%) only. In France (27.6%) and Germany (30.5%), the career explorer had the highest frequency. In Italy, the most prevalent profile was the corporate climber (29.4%), which was second in Germany (28.0%) and third in France (22.0%) and Switzerland (18.5%). The loyal citizen is the second most prevalent profile in Switzerland (28.6%), whereas in all other countries, this profile represented a minority (<10%). In response to our research question, these results demonstrated significant differences in the distribution of career orientation profiles across the four countries.

Discussion

This study examined career orientation profiles in France, Germany, Italy, and Switzerland. Based on a multi-group LCA, we found five career orientation profiles with distinct patterns of boundaryless, protean, and advancement preferences. We labeled them the ambitious self-actualizer, the corporate climber, the career explorer, the unassuming pragmatist, and the loyal citizen. In line with our theorizing, traditional and contemporary as well as blended career orientation profiles were identified. Our findings demonstrated significant differences between profiles in sociodemographic covariates and work- and career-related attitudes, though not quite as clear-cut as hypothesized. Furthermore, the prevalence of the profiles differed across France, Germany, Italy, and Switzerland.

Theoretical implications

Partially replicating and refining earlier research on career orientation profiles ([Briscoe and Hall, 2006](#); [Gerber et al., 2009a, b](#)), our study highlights that individuals may exhibit a range of

career orientation profiles based on different combinations of protean, boundaryless, and advancement preferences, which, as a whole, underlie career aspirations and behaviors and are expressed in different work- and career-related attitudes. In line with previous research, we found the corporate climber as a pure form of the “traditional” career and the career explorer as a pure form of the “contemporary” career (Gerber *et al.*, 2009b; King, 2003; Mayrhofer *et al.*, 2005). In addition, we revealed three profiles that blend traditional and contemporary career elements. We also showed that by considering advancement preferences in addition to boundaryless and protean preferences, a more fine-grained understanding of career orientations can be achieved. Based solely on protean and boundaryless preferences, as in the typology by Briscoe and Hall (2006), the corporate climber would be categorized as “trapped/lost”. According to our findings, however, scoring low on these preferences may be combined with a focus on advancement and thereby represent a rather traditional organizational career. Moreover, the identified ambitious self-actualizer and loyal citizen career orientation profiles support Hall’s (2002) proposition that a combination of high protean career orientation and high loyalty to one’s organization may be in the best interest of career actors because these profiles show high or moderate self-directed career management, commitment to the organization and to one’s own work, and they reported the highest career satisfaction. In contrast, the unassuming pragmatist, who differed from these two profiles mostly with respect to a low preference for advancement, showed the lowest career satisfaction, affective commitment, and perceived employability. This finding possibly indicates that people belonging to this profile might adhere to these preferences out of necessity for stability rather than choice. This assumption is corroborated by the fact that there are significantly more women in this profile who may have denied advancement ambitions due to family obligations or other obstacles (Eagly and Carli, 2007; Heilman *et al.*, 2024). Unfortunately, our data do not allow us to further explore the validity of this interpretation. The career explorer, who fully embodies the “new” career, still reported higher affective commitment than the unassuming pragmatist, but also similarly low levels of career satisfaction and perceived employability. Regarding the likelihood of belonging to one or another profile based on socio-demographic characteristics, we were astonished to find that education had no predictive power at all. One may interpret this result with some optimism regarding the freedom of choice for different career preferences independent of opportunities provided or restricted by higher or lower levels of education, respectively. However, this may also be due to the binary nature of the measure in our study.

Second, this research provides new insights into differences and similarities in the prevalence of career orientations in France, Germany, Italy, and Switzerland, responding to calls for more cross-national comparative career research and contributing to discussions about the comparability of career orientation profiles and the universality of organizational career management across countries (Hirschi and Koen, 2021; Lazarova *et al.*, 2018; Shen *et al.*, 2015). Extending the work by Gerber *et al.* (2009a), who compared Switzerland and the UK, we found that all career orientation profiles were present in France, Germany, Italy, and France, but with large variations in their prevalence. On the one hand, the convergence of profiles might be prompted by high individualism in all four countries (GLOBE, 2020; Thomas and Inkson, 2007), which is also reflected in the preference for self-directed career management in most profiles, except for the corporate climber. On the other hand, the divergence in prevalence points to the relevance of macroeconomic conditions (Cotofan *et al.*, 2023) and cultural differences (Thomas and Inkson, 2007). The ambitious self-actualizer and loyal citizen were mostly present in Switzerland but much less frequent in France, Germany, and Italy. The stable and favorable labor market conditions in Switzerland (e.g. unemployment rate below 5% during the past 20 years, high earnings and job quality, and low job insecurity; ILO, 2021; OECD, 2021b) compared to all other countries may explain the high prevalence of these two profiles. Even though Switzerland’s highly flexible employment legislation (e.g. a notice period of usually 1 week to 3 months), compared to the other three countries, is generally assumed to ease organizational mobility and promote boundaryless careers (Gerber *et al.*, 2009b; Kornblum *et al.*, 2018), this is not what we found. The career explorer, the only

profile with a high boundaryless preference, was found least in Switzerland, while it was most frequent in France and Germany. The role of labor protection for career exploration thus warrants further research. Italy, the country with probably the most fragile economy among the four countries, was the only country where the profile of the corporate climber, which is based on the most traditional career preferences, was the most frequent profile. This, again, is an interesting finding with respect to how career exploration may be fostered. It seems that economic uncertainty does not play a clear-cut role, either.

Practical implications

Our findings offer implications for human resource management and career counseling. The profile-based approach allows organizations and career counselors to identify and consider individual career preferences more holistically, facilitating the provision of specific career advice and programs that are in alignment with their combined career preferences. Employers may benefit from developing awareness of the variety of career orientation profiles prevalent in their organizations as a basis for offering tailored career management strategies and job design to individual employees. In turn, they may want to define which particular career orientations they look for in their employees and may be sure that they provide adequate conditions for the respective career paths. Career explorers and ambitious self-actualizers may be desirable orientations for many employers, but they must also realize that highly self-directed and mobile employees can also be very demanding, possibly beyond what an organization can offer them (Hall *et al.*, 2018; Holman, 2013; Rodrigues *et al.*, 2015). Lastly, our findings have implications for multi-national companies, as they may be confronted with a particularly complex mix of career orientation profiles due to individual, cultural, and national influences. The career orientation profiles we identified as valid, at least for a range of European countries, may serve as a starting point for managers in such companies to gain a more in-depth understanding of employees' career preferences and their sources and impact.

Limitations and future research directions

This study has a number of limitations that offer potential avenues for future research. First, the cross-sectional nature of our data could induce shared-method bias and precludes us from identifying causal relations between the study variables. In fact, effects in both directions are plausible; for example, employees with lower career satisfaction may become career explorers, and/or being a career explorer may negatively affect career satisfaction. While our primary goal was to examine differences in work- and career-related attitudes and sociodemographic covariates, and the prevalence of career orientation profiles across countries, causality should be addressed in future studies, e.g. by using time-lagged study designs. Such studies could also help to substantiate some speculations about the causes and effects mentioned earlier, for instance, with respect to the role of gender in forming career preferences and the role of the economic context in fostering career exploration. Longitudinal cross-country research could provide a wealth of data to more firmly ground our understanding of individual and contextual factors relevant to successful career management. We should also note as a methodological limitation regarding the identified career orientation profiles that, although acceptable with entropy values close to 0.60, entropy values should ideally be above 0.70 (Nylund *et al.*, 2007). A methodological extension could be to apply continuous multi-item measures for protean, boundaryless, and advancement preferences to examine career orientation profiles using a person-centered approach for continuous measures.

Second, future research may investigate personality traits and dispositional characteristics to identify possible antecedents of career orientation profiles. Thereby, also differential effects of interactions between protean, boundaryless, and advancement preferences may be elucidated further. For instance, career anchors (Schein, 1990), as presumably more stable person factors, may drive changes in preferences during an individual's career, such as

boundaryless preferences only coming into play when the need for autonomy cannot be fulfilled in a more traditional career path. Moreover, our study only investigated perceived external employability. Future studies might also examine whether differences between career orientation profiles exist with regard to perceived internal employability. In addition, research suggests examining the closer social context and family background as meso-level characteristics that shape the development of career preferences (Grote and Hall, 2013). Such studies could, for instance, address our supposition that individuals belonging to the Unassuming Pragmatist profile might adhere to weak preferences for mobility and advancement out of necessity rather than choice.

Third, our finding of the same career orientation profiles in France, Germany, Italy, and Switzerland can only be considered tentative evidence for the generalizability of the profiles. While we are confident that our results are robust as we validated them by replicating the solution with a sample split (Spurk *et al.*, 2020), we call for future research to investigate the identified profiles in a broader range of countries. Including additional and more varied countries may reveal further career orientation profiles and allow for the application of multi-level approaches to examine which specific macro factors influence career orientation profiles. Finally, future research may not only consider the momentary macroeconomic situation. The macroeconomic context during impressionable years—the age at which most people enter the job market—seems to have a lasting effect on employees' job preferences during their entire life (Cotofan *et al.*, 2023). Relatedly, research argues that career orientations are largely stable during adulthood (Grote and Hall, 2013; Rodrigues *et al.*, 2013). Thus, macro factors during employees' impressionable years may influence the formation of career orientation profiles even more strongly, which may be an interesting avenue for future research to explore.

Notes

1. A comment was rated as disqualifying if it clearly indicated that the participant does not belong to our target population (e.g. "I am doing an internship during my studies.").
2. The distribution of occupations and industry sectors across the identified career orientation profiles can be found in the [supplemental information](#) document.
3. The items that were not included were "planning for the future" vs. "living for the present" and "save for the future" vs. "spend what you've got and enjoy it". Conceptually, time orientation lacks specificity in relation to career preferences because careers always concern the future. This was also evident in an exploratory factor analysis (principal axis factoring with promax rotation) that we conducted with all nine items of the [Guest and Conway \(2004\)](#) scale where these two items did not form a separate factor and had cross-loadings on the protean, boundaryless, and advancement factors.
4. The analysis was conducted at the item level to preserve interpretability. Aggregated scores based on overall boundaryless, protean, and advancement preferences would obscure the trade-off individuals have to make for each item when responding. Each item conceptually captures unique aspects of career preferences (e.g. desire for employability and job security in the first boundaryless item; orientation toward long-term commitment and multiple employers in the second boundaryless item). The alternative response options of this measure ask for trade-offs that are not necessarily comparable to typical continuous measurement item scales used in factorial analysis (e.g. a statement and an agreement response scale from 1 to 7). The use of a latent class analysis (i.e. treating the items as categorical nominal variables) better accounts for the distinct content carried by each item and its response options and avoids assumptions regarding scoring and aggregation of factorial approaches. Thus, we followed previous research using this measure and carried out the analysis at the item level to detect career orientation profiles (Gerber *et al.*, 2009a, b; Guest and Conway, 2004). Following established procedures when using this measure better allows us to discuss and compare our findings with previous findings.
5. We also had turnover intention included as a career-related attitude in our initial analysis. However, a test of measurement invariance revealed that our measure of turnover intention was not measurement invariant across the four countries and, therefore, not suitable for cross-country comparison analyses.

Thus, we excluded turnover intention from our subsequent analyses. Because the reverse-coded item of perceived external employability would have affected the assumption of scalar measurement invariance, we decided to drop this item following best practice recommendations.

Supplementary material

The supplementary material for this article can be found online.

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Corresponding author

Julian Pfrombeck can be contacted at: julianpfrombeck@cuhk.edu.hk