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#Trending topics in careers: a review and future research agenda

Jos Akkermans, Stella Kubasch,

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#Trending topics in careers: a review and future research agenda

Jos Akkermans and Stella Kubasch

*Department of Management and Organization, Vrije Universiteit Amsterdam,
Amsterdam, The Netherlands*

Abstract

Purpose – Virtually all contemporary scientific papers studying careers emphasize its changing nature. Indeed, careers have been changing during recent decades, for example becoming more complex and unpredictable. Furthermore, hallmarks of the new career – such as individual agency – are clearly increasing in importance in today's labor market. This led the authors to ask the question of whether these changes are actually visible in the topics that career scholars research. In other words, the purpose of this paper is to discover the trending topics in careers.

Design/methodology/approach – To achieve this goal, the authors analyzed all published papers from four core career journals (i.e. *Career Development International*, *Career Development Quarterly*, *Journal of Career Assessment*, and *Journal of Career Development*) between 2012 and 2016. Using a five-step procedure involving three researchers, the authors formulated the 16 most trending topics.

Findings – Some traditional career topics are still quite popular today (e.g. career success as the #1 trending topic), whereas other topics have emerged during recent years (e.g. employability as the #3 trending topic). In addition, some topics that are closely related to career research – such as unemployment and job search – surprisingly turned out not to be a trending topic.

Originality/value – In reviewing all published papers in *CDI*, *CDQ*, *JCA*, and *JCD* between 2012 and 2016, the authors provide a unique overview of currently trending topics, and the authors compare this to the overall discourse on careers. In addition, the authors formulate key questions for future research.

Keywords Careers, Career development, Career success, Career management, Review

Paper type Literature review

Trends in career research

Ever since the introduction of new career paradigms, such as the boundaryless and protean careers (e.g. Arthur *et al.*, 2005; Hall, 2004), the emphasis in the scholarly debate on careers has shifted toward agency and career self-management as the core foundation of career development. To illustrate, topics that have gained momentum in the literature since that time include career competencies and employability (e.g. Akkermans and Tims, 2017; Forrier *et al.*, 2015; Kuijpers *et al.*, 2006; Van der Heijde and Van Der Heijden, 2006), calling (e.g. Dik and Duffy, 2009; Dobrow and Tosti-Kharas, 2011; Hall and Chandler, 2005), and proactive career behaviors (e.g. De Vos *et al.*, 2009; King, 2004; Strauss *et al.*, 2012). All these topics exemplify the importance of the individual taking responsibility for their own career success. At the same time, scholars have increasingly been calling for more integration of career research with other domains, predominantly with research on organizational behavior (Hall and Las Heras, 2010) and occupational health (De Vos and Van der Heijden, 2015). Taken together, it is clear that careers – and the scientific study of careers – have significantly changed over the past few decades. Yet, is this also visible in the actual topics that career scholars are publishing about? And have any new directions been presented? Based on these questions, we set out to study whether the past five years of research might have uncovered any emerging trends in the field. Because of the recent worldwide economic crisis and the rise of a societal debate on sustainability, for example through



topics such as corporate social responsibility (Lindgreen and Swaen, 2010; Wickert *et al.*, 2016) and meaningful work (Arnold *et al.*, 2007; Steger *et al.*, 2012), it would make sense that the most recent literature in the field of careers might have moved into a new direction, featuring topics that would bring the scholarly debate forward. Therefore, the main question guiding this paper is:

RQ. What are the trending topics in career research over the past five years?

To answer this question, we analyzed all published papers of the past five years – between 2012 and 2016 – of four journals that specifically focus on career research: *Career Development International (CDI)*, *Career Development Quarterly (CDQ)*, *Journal of Career Assessment (JCA)*, and *Journal of Career Development (JCD)*. In total, we reviewed 693 papers in 105 issues, and examined which central topics we could discover among those published articles. Furthermore, we compared the four journals in terms of their most frequently published topics to explore whether the trending topics are similar or different. Below, we will first elaborate on the approach that we used to analyze the published papers, and the choices we made to come up with the final list of main topics. As part of this, we will present several statistics related to the total number of papers and topics, both in general and for each of the four journals. Next, we will elaborate on the 16 key trending topics that we discovered, we will reflect on the main conclusions in each of these topics, and we will present several avenues for future research in each of these topics. Finally, we will reflect on our review, compare the journals, and formulate several additional possible avenues for future research.

Examining which topics are trending

To examine the trending topics in career research, we focused on four international peer-reviewed journals that specifically focus on careers: *CDI*, *CDQ*, *JCA*, and *JCD*. To gain an insight into the trends of the latest research, we decided to analyze the past five years for each journal which includes all papers published in the period between 2012 and 2016. In total, we analyzed 105 issues and 693 articles. All papers were independently analyzed by the first and second author, as well as by a research assistant who was closely involved in reviewing the papers and determining the trending topics (Table I).

To define the trending topics that have been covered in the articles, we went through five stages of analysis. First, we analyzed 35 issues and 192 articles of *CDI* and assigned a maximum of five topics to each paper. This means that one paper can be classified according to several different topics, implying that the total sum of topics occurring in the journals exceeds the total number of published papers. Most papers were coded with three topics. This preliminary analysis of *CDI* articles served as a benchmark for coding the topics and resulted in three independent preliminary lists of topics from each of the researchers involved. By working independently in the first step, we increased the inter-rater reliability of the coding process. Second, we co-reviewed the three lists, checking for overlap and differences between the topics, and then integrated the findings into a catalog of 25 categories. Third, we independently analyzed all published papers in *CDQ*, *JCA*, and *JCD*, and assigned categories to each paper based on the preliminary list of 25 categories. Throughout this process, we reflected on those 25 categories to check whether they were fully representative for all four journals and, in the end, we compared our three lists again to come up with an overall list. Specifically, based on this analysis, we made

#Trending
topics in
careers

587

Journal	Number of articles	Number of issues	Impact factor	Article influence score
<i>CDI</i>	192	35	1.038	54
<i>CDQ</i>	130	20	1.060	30
<i>JCA</i>	215	20	1.330	55
<i>JCD</i>	156	30	1.285	36

Table I.
Overview of analyzed
articles in total and
per journal

some changes to the preliminary list, e.g., adding counseling and mentoring as a distinct topic but removing psychological contract as a separate topic. Fourth, we evaluated the number of appearances of each category across the four analyzed journals. Based on the numbers, we dropped several categories from the list of trending topics. Specifically, we required a category to appear in at least 5 percent of the papers to be considered a trending topic. Consequently, categories such as talent acquisition, leadership, and unemployment and job search – which were on the preliminary list of categories – were ruled out as trending topics based on the small number of published papers. Finally, we checked for overlap among the categories with regard to the content of the papers. For example, the categories of commitment and satisfaction were grouped under the overarching topic of attitudes. After completing these five steps of analysis, we concluded with a list of 16 trending topics in career research.

Trending topics in careers between 2012 and 2016

Table II and Figure 1 display the overview of trending topics in careers that we discovered in our analysis of published papers in *CDI*, *CDQ*, *JCA*, and *JCD*. Below, we will discuss each

#	Trending topics	Total	CDI	CDQ	JCA	JCD
1	Career success	214	41	48	61	64
2	Career decision making	213	29	47	78	59
3	Employability	188	37	41	53	57
4	Attitudes	146	58	13	44	31
5	Health and well-being	139	61	13	59	31
6	Career capital	132	21	26	61	24
7	Mentoring and counseling	102	18	29	28	27
8	Gender	90	25	24	23	18
9	Personality	89	27	9	44	9
10	Career mobility	86	44	13	10	19
11	Culture	69	15	7	17	30
12	Social capital	68	25	8	18	17
13	Identity	51	10	14	16	11
14	Meaningfulness	48	6	7	29	6
15	Work-home interaction	42	13	5	12	12
16	Proactive behavior	41	23	3	11	4

Table II.
Overview of trending topics ordered by number of appearances in papers



Figure 1.
Trending topics displayed in relative popularity

of these topics in more detail. Please note that this list is by no means meant to be a perfect representation of all published work in the four journals. Although we went through a careful and rigorous process of selecting the final topics, there is of course overlap between trending topics in certain cases. For example, developing certain career-related resources and competencies (Trending topic #6: career capital) can be closely related to possessing employability-related skills (Trending topic #3: employability). Yet, taken together, we feel that the 16 trending topics that we present form a comprehensive overview of recently published topics in the four career journals, and are an indication of themes that have been discussed elaborately as part of the recent scholarly debate on careers. For each of the trending topics, we will discuss: what the most common themes were, some statistics regarding the number of published papers, and research questions within each trending topic that might inspire future research.

Trending topic #1: career success

The #1 trending topic in the four career journals between 2012 and 2016 was career success. Within this category, the papers examined all kinds of career outcomes and ways to define a career as a success. An interesting finding was that only a few studies examined objective indicators of career success (e.g. Guan *et al.*, 2013; Van Dierendonck and Van der Gaast, 2013), although some studies did research the topic of career advancement (e.g. Laud and Johnson, 2012). At the same time, most studies related to career success assessed some type of subjective career success, mostly operationalized in terms of career satisfaction (e.g. Ngo and Li, 2015; Spurk *et al.*, 2015; Zhang, Hirschi, Herrmann, Wei and Zhang, 2015). Subjective career success was also examined in more indirect ways, for example by studying goal achievement in one's career (Creed and Hood, 2015) and expectations of career success (Shoffner *et al.*, 2015). Finally, there were explorative studies that focused on conceptualizing what career success is (e.g. Afiouni and Karam, 2014).

Virtually all of the published papers on career success were empirical in nature, mostly quantitative and some qualitative. In addition, as mentioned earlier, it was striking to see that the majority of the studies adhered to the, relatively traditional, concept of career satisfaction as the indicator of subjective career success. The few studies that assessed objective career success also used traditional indicators, such as salary and number of promotions. Thus, we would conclude that the literature on career success is overall quite similar between 2012 and 2016 as it had been in the preceding years. All in all, though, it is clear that the topic of career success – which has been at the core of the scholarly debate on careers for a long time – is still a major issue in contemporary research. This is further emphasized by the fact that this topic was featured in 214 out of 693 papers, and it was the overall #1 trending topic. For *CDI*, career success was the fourth most published topic (21 papers, 21.4 percent). This is an interesting difference with the other three journals, as *CDQ* (48 papers, 36.9 percent) and *JCD* (64 papers, 41.0 percent) had almost double that percentage, and *JCA* (61 papers, 28.4 percent) also had clearly more published papers on this topic.

After Heslin's (2005) call for more research on the conceptualization of subjective career success, several recent attempts have been made to present new, more contemporary perspectives on subjective career success. For example, Shockley *et al.* (2016) and Mayrhofer *et al.* (2016) have provided new characterizations of subjective career success based on qualitative and cross-cultural research. However, these recent notions on career success have yet to gain real momentum, and it would seem to be a particularly valuable research direction to further explore their – and potentially other – ideas. Future research within the trending topic of career success might, therefore, focus both on theorizing and empirically testing these notions of career success, thereby contributing to a broader discussion of what career success actually is and how it can be measured. In doing so, it is important to take into account the many ongoing labor market changes, such as increasing

part-time work, contingent work, and gig work (e.g. freelance or contract work). For example, studies might examine whether new ways of organizing work can impact how career success is achieved and which forms it can take, whether career success is the same construct among white collar, blue collar, and pink collar workers, and whether objective indicators of career success are still relevant in an environment where meaningfulness and external mobility are becoming the norm. Such research would not only bring the field of career success further but would also provide important insights into changing employee relations, and their link with contemporary career success. Whereas the former suggestion for future research focuses on building general theory and conceptualization of career success, another avenue for research would be to study specific career paths of certain target groups. This has, of course, been done before, for example, Crossland *et al.* (2014) who studied career patterns of CEOs, and Simmons *et al.* (2014) did the same for entrepreneurs. Yet, these studies typically do not fully integrate research from their own domain (e.g. CEOs, entrepreneurs) with existing state-of-the-art research in careers. Therefore, we encourage researchers to cross the boundaries of their own disciplines and examine unique career success dimensions and antecedents for particular groups on the labor market. These could include CEOs and entrepreneurs, but, for example also project managers, expats, migrant workers, students, and contingent workers. Taken together, advancing the literature on career success both in a general and more specific way can significantly enhance our understanding of this phenomenon.

Trending topic #2: career decision making

Following closely behind, career success was the trending topic of career decision making. The papers that belong to this category have a common underlying focus on career-related choices and decisions, and the lack thereof (i.e. career indecision). Themes in this category include career choices and paths (e.g. Gubler *et al.*, 2015; Kaminsky and Behrend, 2015; Leong *et al.*, 2014), decision-making strategies (e.g. Creed and Hughes, 2013), and career aspirations (e.g. Schuette *et al.*, 2012). This category also includes decision making in terms of choosing a specific career path, such as entrepreneurship (e.g. Chua and Bedford, 2016; Hirschi and Fischer, 2013), as well as the topic of career indecision (e.g. Braunstein-Bercovitz, 2014) and career decision difficulties (e.g. Shin and Kelly, 2015).

Career decision making is studied both as an antecedent and an outcome across the published papers. For example, some studies focused on how certain career-related decisions can impact one's long-term career development, whereas others examine the impact of personality or attitudes on career decision making. Interestingly, it seems that most studies in this trending topic were published between 2012 and 2015, with only a few of them published in 2016. This could, of course, be a coincidence, yet there might be a trend of decreasing momentum for these topics. Considering the apparently increasing momentum of career capital – as will be discussed below – it could be speculated that the emphasis of career studies might be shifting from a more traditional perspective on decision making toward a more contemporary perspective on personal resources and competencies. Still, overall there were 213 papers about career decision making, which makes it the second most popular trending topic overall (only career success has one more with 214). Indeed, career decision making was in the top five trending topics for *CDQ* (47 papers, 36.2 percent), *JCD* (59 papers, 37.8 percent), and *JCA* (78 papers, 36.3 percent), coming in at second place at *CDQ* and *JCD*, and first place at *JCA*. Thus, even though there might have been a slight downward trend in 2016, career decision making is certainly still a prominent topic in the scholarly debate. For *CDI*, though, career decision making was not in the top five trending topics (29 papers, 15.1 percent), which again seems to indicate that *CDI* has had a somewhat different focus compared to the other three journals in studying careers.

There are some important matters to tackle in the domain of career decision making. One such future research direction relates to further examining the key factors underlying career decision making, thereby also taking into account multiple levels of analysis. Wang and Wanberg (2017) recently reviewed research on career management and one of their conclusions was that the career decision making literature has primarily researched individual-level mechanisms and motivations, whereas it would be important to also incorporate organizational needs (e.g. need for talent) and societal trends (e.g. employment opportunities). In-depth knowledge about the interplay between micro, meso, and macro issues in individual career decision making is still mostly lacking, but this broader understanding of career decision making is necessary to gain a better understanding of the total complexity of this issue (De Vos and Cambré, 2017). This interplay can work two ways: organizations and society may impact individual career decision making, but individual career decisions may also impact their organization and society. As an example of the former, studies could examine how important individual desires and motivations (e.g. one's calling, career ambition) are compared to organizational issues (e.g. developmental opportunities, person-organization fit) and societal issues (e.g. chances of finding employment in one's preferred occupation) when making career-related decisions. In this case, the career decision making literature would benefit greatly from joining forces with recent job search literature (e.g. Dineen *et al.*, 2017; Van Hooft *et al.*, 2013) and vice versa. As an example of the latter, studies could investigate how the career decisions that one person makes might impact their direct colleagues, their team, and their organization. For example, recent research on collective turnover (Hancock *et al.*, 2017) has convincingly shown that individual decisions to leave an organization can lead to a contagious process of collective turnover. Such processes, in which individual career decisions significantly impact others around them, would be a valuable avenue for future research. In sum, future research on career decision making could provide a broader and more comprehensive understanding of career decision-making processes at different levels of analysis, and subsequently provide ideas and guidelines that career coaches and HR departments might use to support individuals in their career decision making and help them understand the implications of such choices.

Trending topic #3: employability

#3 on the list of trending topics is employability. Studies within this category focus on the competencies and ability necessary to retain and/or find employment. There were two distinct research streams visible within this trending topic: general employability and graduate employability. With regard to the former, most studies focused either on perceived employability (e.g. Lin, 2015; Lu *et al.*, 2016; Vanhercke *et al.*, 2015), or on employability competencies (e.g. Van der Klink *et al.*, 2014; Van Emmerik *et al.*, 2012; Zhu *et al.*, 2013), which represent two of the most dominant streams of employability literature in general. Also, some studies (e.g. Kovalenko and Mortelmans, 2016) reflected on the construct of employability, and specifically on the role of the context in shaping individual employability. With regard to graduate employability, although some published papers were closely related to the general employability literature (e.g. Creed and Gagliardi, 2015), it seems that this is mostly an independent research stream with different scholars attached to it. Typically, these papers focused on the ability to find and retain employment in early careers and among young adults (e.g. Huang, 2015; Ling and O'Brien, 2013; Tate *et al.*, 2015). We should note, that especially the topic of graduate employability – while a clearly emerging stream in the general career literature – is closely related to several other trending topics, most notably career mobility (in terms of school-to-work transitions) and career capital (in terms of career-related competencies).

From the published papers in the past five years, two things are very clear. First, employability is a relatively new topic that has gained a lot of momentum from 2012 to 2016.

The number of published papers on this topic has clearly increased in this period compared to prior years, and has also increased within this time period. Second, employability is still in the relatively early stages of conceptual development, which shows from the different perspectives that have arisen and the use of employability as antecedent, outcome, moderator, and mediator across studies. Taken together, with a total of 188 papers featuring employability, and it being the #3 trending topic for *CDQ* (41 papers, 31.5 percent) and *JCD* (57 papers, 36.5 percent), and the #5 for *JCA* (53 papers, 24.7 percent) and *CDI* (37 papers, 19.3 percent), the concept has established itself at the center of the scholarly debate on careers. An interesting observation was that *CDI* seemed to primarily feature employability in terms of perceived and competence-based employability and not that much graduate employability, whereas the other three journals were more balanced in this regard.

There are several avenues that need to be further explored in this topic. First, there is a need for more theoretical development and conceptual clarity of employability. Some early attempts have been made to achieve this, for example Forrier *et al.* (2015) conceptualized a model with an input side (i.e. competence-based and dispositional employability) and an output side (i.e. perceived employability). Also, recent research has started to differentiate between external and internal employability, and between quantitative and qualitative employability (e.g. Van den Broeck *et al.*, 2014) as a next step in better understanding its antecedents and consequences. Based on these developments, we argue that future research might focus on building integrative theory that further brings together the different perspectives that exist within this domain and provides a comprehensive understanding of the concept of employability. Another important advancement in the debate on employability would be to integrate the – mostly European – literature on employability with the – mostly North American – literature on graduate employability (e.g. Tomlinson and Holmes, 2017) and also the labor economics perspective on employability where it essentially all started. Although graduate employability focuses on a specific target group of young adults, whereas employability in general also concerns other age groups, it would be valuable to synthesize these debates and explore similarities and differences. Similarly, studying the interplay between objective and subjective conceptualizations of employability would potentially be a valuable addition to our knowledge on the topic. Thus, bringing these three streams of literature together would enrich all of them and could enhance our understanding of how employability is conceptualized and developed. Third, it would be important to integrate the literature on employability with the HRM literature, to further explore the value of employability for both individuals and organizations. Recent research on the employability management paradox (e.g. Nelissen *et al.*, 2017) has started to shed more light on the benefits and the potential trade-off effects of employability, yet a strong understanding of these dynamics is still lacking. Examining, for example, the interplay between HRM investments, employability, and outcomes such as turnover, commitment, and performance, would be a valuable route to take for employability researchers and HRM alike. Furthermore, it would shed more light on the value of employability not just for individual employees but also for organizations. Finally, future research could examine employability especially among vulnerable groups on the labor market, such as low-skilled workers, people with disabilities, and migrant workers. The vast majority of employability research has been performed on highly educated individuals from developed economies, yet this might offer only a very limited picture of what employability is, how it can be developed, and what its consequences are. A recent report from the Institute for Prospective Technological Studies (Green *et al.*, 2013) and a recent PhD thesis of Sanders (2016) have started to shed some light on these issues, yet our knowledge base in this regard is very limited. Therefore, we would encourage future researchers to examine the employability of various vulnerable groups of the labor market, thereby expanding what we know about the concept of employability while also providing insights into supporting these workers to become and remain employable.

Trending topic #4: attitudes

Attitudes comprised the overall #4 trending topic. The common denominator in this category is a focus on how workers feel about, think about, and perceive their work and careers. This category includes both work-related attitudes, such as job satisfaction (e.g. Borgogni *et al.*, 2016; Maggiori *et al.*, 2016; Richter *et al.*, 2013), life satisfaction (e.g. Douglass *et al.*, 2016; Praskova *et al.*, 2015), job involvement (e.g. Fedi *et al.*, 2016; Horvath, 2015), and organizational commitment (e.g. Conklin *et al.*, 2013; Stinglhamber *et al.*, 2015), and also career-related attitudes, such as protean and boundaryless career attitudes (e.g. Porter *et al.*, 2016; Supeli and Creed, 2016) and career commitment (e.g. Okurame, 2012; Vandenberghe and Basak Ok, 2013). In addition, attitudes toward entrepreneurship (e.g. Yang *et al.*, 2015) and aging (e.g. Lu, 2012) are included in this category. All in all, this is quite a broad category that combines the disciplines of careers, organizational behavior, and psychology.

Overall, attitudes were included in studies both as antecedents (e.g. of performance and success) and outcomes (e.g. of employability and leadership), and were included in a wide variety of studies, ranging from job design to teamwork, from leadership to occupational health, and from career success to work-home interaction. Thus, although attitudes, at their core, might be considered a typical OB topic, it is clear that they are also central to career-related studies, demonstrated by the 146 times that attitudes were part of published papers in the four journals between 2012-2016. To illustrate, attitudes were in the top five trending topics of *CDI* (58 papers, 30.2 percent) and *JCD* (31 papers, 19.9 percent); for *CDQ* (13 papers, 10.0 percent) and *JCA* (44 papers, 20.5 percent) it was the #6 trending topic. The distribution was interesting for this topic as the majority of papers were from *CDI*, where attitudes were the #2 trending topic, once again indicating that *CDI* has featured different themes prominently compared to the other career journals.

In terms of future research, we see three major developments in the field of attitudes that would be valuable to include in career research. First, a recent trend in research on attitudes is the issue of which target the attitudes relate to and, more specifically, that individuals can have attitudes toward multiple targets simultaneously. For example, recent research on workplace commitment (e.g. Klein *et al.*, 2012; Redman and Snape, 2005) has argued that the traditional notion of organizational commitment – in which an individual has a unique commitment to their employer – may be too restrictive, as individuals nowadays may feel committed to several targets at once. For example, project workers can be committed both to their employing organization and their project team, and entrepreneurs can be committed to their own enterprise and to several organizations that hire them. This discussion on commitment can be generalized to attitudes in a broader perspective, as ongoing changes on the labor market also affect individuals' involvement, job satisfaction, and various other attitudes in terms of the target to which the attitude is related. Moreover, this perspective seems especially fruitful for career research, as the emphasis within this field has increasingly been put on inter-organizational mobility, flexibility, and the decrease of boundaries. Thus, it would be fascinating to further examine attitudes in relation to career development by adopting the perspective of multiple targets simultaneously and examining what this means for individual career management. A second trend in the domain of attitudes that might enhance career research relates to individual vs collective attitudes. Recent meta-analyses (e.g. Heavey *et al.*, 2013; Whitman *et al.*, 2010) have made it clear that attitudes not only impact outcomes on an individual level but also on a collective level. For example, the overall climate in a team or unit (i.e. unit-level attitudes) is a crucial determinant of outcomes (e.g. motivation, performance) over and above individual attitudes. Building on this, we encourage researchers to incorporate such collective attitudes in career research as well, both in terms of theory (i.e. taking into account the climate in a unit when theorizing about the role of attitudes in careers) and methodology (e.g. using multi-level designs). Finally, the topic of conflicting attitudes (e.g. Judge *et al.*, 2017) would be important

to incorporate in future career research. Positive and negative attitudes can exist regarding the same target (e.g. being satisfied with certain parts of one's job but dissatisfied with other parts), and the same could apply to career-related attitudes. For example, someone might be highly committed to one's employer but also be steered by a boundaryless mindset of external development. Examining such interplays between different attitudes – both positive and negative – would significantly contribute to our understanding of attitudes and career development.

Trending topic #5: health and well-being

The fifth most published about topic in the four career journals was health and well-being. This topic focuses on both positive and negative aspects of employee health and well-being, and forms a bridge between careers and occupational health research. The papers in this category focused on topics such as general health (e.g. Akkermans, Brenninkmeijer, Van den Bossche, Blonk and Schaufeli, 2013; Van den Tooren and De Jong, 2014), occupational stress (e.g. Bergin and Jimmieson, 2015; Stoltz *et al.*, 2013), work engagement (e.g. Hu *et al.*, 2013; Ouweneel *et al.*, 2013), burnout and exhaustion (e.g. Blau *et al.*, 2012; Laughman *et al.*, 2016), and workaholism (e.g. Caesens *et al.*, 2014; Guglielmi *et al.*, 2012). In addition, some papers also studied specific disorders, such as depression (e.g. Walker and Peterson, 2012), ADHD (e.g. Dipeolu *et al.*, 2015), and Asperger's syndrome (e.g. Mynatt *et al.*, 2014). Interestingly, in the vast majority of published papers, health and well-being were examined in close connection to other topics, such as employability, job insecurity, and unemployment. Furthermore, those related topics, rather than health and well-being, were often the main focus of those studies. Thus, health and well-being are high on the list of trending topics but in many cases, these topics were "a support act" to other main topics. We should note that the studies on specific disorders are an exception here as they were usually the primary focus in the published papers.

Health and well-being variables were used in a plethora of different ways. Some studies treated it like antecedents, in which health and well-being might predict work and career outcomes, whereas other studies examined how health and well-being (as an outcome variable) might be improved through various mechanisms. As mentioned earlier, many studies in this category actively build a bridge between occupational health research and career research by integrating the career context in studies on health and well-being, for example looking at the impact of certain disorders on career planning and career success. A total of 139 papers included health and well-being, but there was a clear difference between the journals. Whereas *CDQ* had only 13 (10.0 percent) studies on this topic, *CDI* published 61 papers (31.8 percent) about it. *JCA* (59 papers, 27.4 percent) and *JCD* (31 papers, 19.9 percent) were in between. It seems like the peak of publications on these topics was between 2012 and 2014, with fewer papers being published on it in 2015 and 2016. Perhaps this can be explained by the fact that the field has become quite mature and because of a steady rise of studies on new and related, but different, constructs, such as job crafting and personal resources.

Although the field of health and well-being might be mature, there are still valuable directions to take for future research in this area. First, an important, yet underresearched, topic that bridges occupational health and careers is the concept of sustainable employability. This topic has received considerable attention in the (mostly Western European) media and has been high on trending topics lists in HRM departments for several years, yet scientific research is still rare. The few studies that did appear thus far (e.g. Van der Heijden *et al.*, 2016; Van der Klink *et al.*, 2016) have typically discerned two main dimensions of sustainable employability: a health component (e.g. workability, vitality, engagement) and a capability component (e.g. job skills, competence-based employability). Yet, there is still an ongoing debate about what sustainable employability is, what its dimensions are, and whether certain factors (e.g. job satisfaction, self-efficacy) are

antecedents/moderators/outcomes or whether they are part of the construct itself. Thus, it seems worthwhile to further pursue a clear conceptualization of sustainable employability and to gain a better insight into antecedents, moderators, and outcomes. Relating this directly to the trending topic of health and well-being, it is crucial to integrate state-of-the-art research on these topics as they form a key building block of sustainable employability. Future studies might, for example, include actual medical data and innovative ways of measuring health (e.g. using apps or biological measures) to study how employee health and well-being affects their sustainable employment opportunities and, thereby, their career development. In addition, popular concepts in this trending topic, such as burnout, workaholism, and specific disorders, are likely to all influence one's sustainable employability, and we encourage researchers to examine such relationships in more depth. A second avenue for future research is connected to the upcoming trend of analytics and big data. In recent years, HR analytics (or: people analytics) has gained widespread momentum (e.g. CIPD, 2013; Davenport *et al.*, 2010), yet is still a nascent research area. Using HR analytics would potentially be a major addition to existing knowledge on health and well-being, for example by using big data about sickness absence and health checks to predict employee development and career pathways. Although the study of HR analytics is not without criticism (Angrave *et al.*, 2016) and it would certainly not replace existing ways of examining health and well-being, we argue that it would be an important complementary research avenue that might enhance our understanding of health and well-being related to career development.

Trending topic #6: career capital

Career capital is about career-related resources embedded within individuals that are necessary to navigate one's career. Accordingly, this trending topic features personal resources and competencies central to contemporary career development, including topics such as career adaptability (e.g. Buyukgoze-Kavas, 2016; Cheung and Jin, 2016; Spurk *et al.*, 2016), career competencies (e.g. Akkermans, Brenninkmeijer, Huibers and Blonk, 2013; Plomp *et al.*, 2016), and self-efficacy (e.g. Guerrero and Hatala, 2015; Lee and Park, 2012). Also, themes such as planned happenstance (e.g. Rhee *et al.*, 2016) and ambiguity tolerance (e.g. Xu and Tracey, 2015) are included in this trending topic, as they closely relate to personal resources in one's career. Although the original definition of the construct of career capital was based on the three ways of knowing framework (i.e. knowing why, knowing whom, knowing how), there were only a few studies that actually examined this specific type of career capital (e.g. Fleisher *et al.*, 2014). The focus within this topic seems to have shifted toward related constructs, thereby complementing the literature on career capital. Interestingly, we found that although the topic of career adaptability – which has gained enormous popularity in other journals such as the *Journal of Vocational Behavior* – has gained momentum during recent years, it was not as prominently featured in the four career journals as perhaps expected.

Career capital variables are typically considered to be antecedents, for example of career-related success and work-related outcomes. Oftentimes, they were modeled as the starting point of mediation models, where career capital might set into motion a process leading to improved outcomes via, for example, engagement or proactive behavior. In several cases, they were also modeled as moderators or mediators themselves. Although the topic of career capital is present throughout the five years we analyzed, it seems that the topic is gaining some momentum since 2015, possibly because of the generally growing popularity of personal resources in work-related and career-related studies. In total, there were 132 studies that included a career capital construct, and it was in the top five trending topic in two out of four journals, namely, *CDQ* (26 papers, 20.0 percent, fifth spot) and *JCA* (61 papers, 28.4 percent, third spot). For *CDI* (21 papers, 10.9 percent) and *JCD* (24 papers, 15.4 percent), career capital was not in the top five trending topics.

In terms of future research, a key direction to take would be to explicitly compare different types of career capital. An example of such a comparison would be to compare the constructs of career competencies (e.g. Akkermans, Brenninkmeijer, Huibers and Blonk, 2013) and career adaptability (e.g. Zacher, 2014), two constructs that have recently gained momentum and that are both related to individual resources to manage one's career, yet have not been studied in tandem. Similarly, future research might explore the similarities and differences between career resilience (e.g. Bimrose and Hearne, 2012) and ambiguity tolerance (e.g. Furnham and Marks, 2013), two constructs that both relate to how individuals deal with setbacks and uncertainty. On a general level, it is important that future research addresses such issues, and provides more conceptual clarity on different forms of career capital, as well as their mutual interactions and their joint effects on career-related outcomes. A second avenue of future research could focus on how such resources are developed and mobilized. Recent research in the domain of occupational health has started to shed more light on how personal resources can influence employee well-being but also on how such resources can be enhanced via interventions (e.g. Van Wingerden *et al.*, 2016). Similarly, it would be important to further investigate how individuals can build their career resources. Quite a lot is known at this point about their effects on outcomes, yet the antecedents of career resources are still mostly unknown. Furthermore, Bakker and Demerouti (2017) argued that we should not just take into account personal resources, but also personal demands. They mention high expectations and perfectionism as examples of such demands. Relating this to the topic of career capital, it is clear that the emphasis in this domain has thus far been put on resources as well (e.g. career competencies, career resilience, self-efficacy) yet the demand side has been largely ignored. Thus, it seems like a promising avenue for future research to examine personal demands in terms of career capital, for example, studying how high career expectations or ambitions might positively or negatively impact individual career development and success.

Trending topic #7: mentoring and counseling

The key characteristic of mentoring and counseling is research on the role of external persons – such as a mentor or career coach – in individual career development. Although clearly most prominent in *CDQ*, supporting and helping others in their career development was generally a core topic in the published papers on careers during the past five years. This trending topic includes studies on mentoring (e.g. Poteat *et al.*, 2015; St-Jean and Mathieu, 2015; Torney Welsh *et al.*, 2012), career-related support (e.g. Dickson *et al.*, 2014; Zhao, 2012), and role models (e.g. Austin and Nauta, 2016). In addition, it includes the topics of career counseling and coaching (e.g. Elad-Strenger and Littman-Ovadia, 2012; Rehfuß *et al.*, 2012; Schmidt *et al.*, 2012; Zhou *et al.*, 2016). We should note that although we combined mentoring and counseling into one trending topic because of their shared underlying foundation of external support for career development, the two literatures are actually mostly separated from each other. More specifically, the published papers of coaching were predominantly dedicated career coaching papers, whereas mentoring is more of a multidisciplinary field that prominently includes OB and management research.

Mentoring and counseling were primarily studied as a means to enhance other career-related concepts. Most notably, mentoring and counseling were often studied in tandem with the trending topics of attitudes and career capital: supporting and coaching people is an effective way to help workers develop positive attitudes (e.g. commitment, satisfaction) and relevant career capital (e.g. self-efficacy) during their career. Furthermore, although the topics of mentoring and career support were quite stable over the past five years, it appears that career counseling had a peak in 2012 and then lost some momentum in terms of published papers (although we should note that the first two issues of *CDQ* in 2017 did feature a number of career counseling papers again). Finally, there were clear differences

between the four journals with regard to this trending topic. Overall, there were 102 papers in this category, which means that 14.7 percent of all papers dealt with mentoring and counseling in some way. However, this was not evenly distributed among journals, as *CDQ* had a 22 percent rate (it was the #4 trending topic for *CDQ*), whereas it was not in the top five for any of the other three journals: *CDI* had a 9.4 percent rate, and *JCA* and *JCD* were in between (13 and 17 percent, respectively). Furthermore, *CDQ* published relatively many papers on counseling, whereas *CDI* published more about mentoring and support. *JCA* and *JCD* were again more balanced, although they also had slightly more publications on mentoring and support vs counseling.

Eby *et al.* (2013) concluded that the topic of mentoring, despite being around for quite a long time now, still has a relatively small and scattered knowledge base. They argue, among other things, that we still lack a fundamental understanding of mentor-mentee relationships and their interplay, for example, in terms of relationships that are characterized by differences in gender, ethnicity, power, and personality. In addition, there are still gaps in our knowledge regarding the antecedents, moderators, and outcomes of formal vs informal mentoring relationships, and the different types of formal and informal mentoring relationships (Eby *et al.*, 2013). Furthermore, research on potential costs and benefits of mentoring from the perspective of the mentor vs the mentee, and their interplay is far from complete (Ghosh, 2014; Ghosh and Reio, 2013). Besides these fundamental characteristics of mentor-mentee relationships, another important direction for future research on mentoring would be to study dynamic processes over time. Allen *et al.* (2017) argued that there are several concrete questions to be answered here, including whether mentoring processes are continuous vs discontinuous, which types of phases of mentoring relationships exist and whether these might differ between individuals, and how one's unique background and experience as a mentor or mentee might influence current mentoring relationships. Taken together, it is clear that there are still some fundamental questions to be answered in future mentoring research, most notably concerning the core characteristics of mentor-mentee relationships and how they develop over time. In terms of career coaching research, we also see two important suggestions for future research. First, Jones *et al.* (2016) argued that many published studies on coaching do not provide a detailed account of the coaching interventions that are the subject of study. Thus, the focus of papers on (career) coaching is usually to test the effectiveness of interventions and to see which elements of career coaching might benefit coachee career development. However, intervention studies – which typically have quasi-experimental designs in career-related studies – need to adhere to strict guidelines in terms of detailed description of the method and process involved. Therefore, a very concrete suggestion for future research on counseling would be to clearly describe the methodology and mechanisms that are part of the counseling interventions. This would help the field forward by exploring effective – and less effective – intervention mechanisms of career coaching. Second, as the field of coaching in general – and career coaching, specifically – is still quite young, there is a lack of theoretical development. Theeboom *et al.* (2014) meta-analyzed existing studies about coaching and concluded that we need a stronger theoretical understanding of how and why coaching interventions are effective. Taken together, the implications for future research on career coaching are threefold: to build theory on the how and why of effectiveness, to clearly describe the methodology and underlying mechanisms, and, based on the first two suggestions, and to perform solid (quasi)experimental studies that test coaching interventions.

Trending topic #8: gender

Gender turned out to be the #8 most trending topic in the four career journals. There was a variety of studies examining gender, including studies that explicitly focused on gender differences (e.g. Hüttges and Fay, 2015; Kim *et al.*, 2015; Kulik *et al.*, 2016;

Whitmarsh and Wentworth, 2012), studies that used it more as an indirect measure (e.g. a moderator) (e.g. Harrison and Budworth, 2015; Raque-Bogdan *et al.*, 2013), and also studies examining the glass ceiling (e.g. Ezzedeen *et al.*, 2015), career choices, and stereotypes among women (e.g. Buse *et al.*, 2013; Deemer *et al.*, 2016), and parenthood in terms of the role of gender (e.g. Kulik and Liberman, 2013; Lewis *et al.*, 2015). Although there were quite some studies that examined gender differences and gender diversity, the main emphasis in the majority of the studies was on women, for example, exploring barriers and discrimination that they might face in their work and careers. Also, although diversity was in itself not a trending topic, the topics of gender and diversity are closely related and this was clearly visible in the published papers that we analyzed.

The studies focusing on gender differences typically made comparisons between males and females in terms of, for example, job opportunities and career patterns. In addition, the studies focusing on women's careers often examined specific career paths, such as women in academia and women in engineering. Finally, especially since 2015, the number of papers on the combination of both motherhood (e.g. how to combine motherhood with a career) and, to a lesser degree, fatherhood (e.g. stay-at-home fathers) seems to be increasing, indicating that this could be a trending topic for the next few years as well. In total, 90 papers (almost 13 percent) discussed the topic of gender. Although it was not in the top five trending topics of any of the four journals, the topic was covered in all journals in around 11-13 percent of the papers, with *CDQ* having a slightly higher percentage (18 percent).

Several ongoing developments in the domain of gender studies might be relevant for career studies, and we mention three of them. First, the main emphasis on studies that examine women's career development and success have focused on what women need to do in order to be successful and which barriers might exist to do so (e.g. glass ceiling effect). An important next step in this research is to study the role of other actors. One clear example in this regard is recruitment and selection practices. Doldor *et al.* (2016) recently showed that headhunters and executive search firms have an important role to play in increasing gender diversity in corporate boards. In addition, recent studies on anonymous applications procedures (e.g. Åslund and Skans, 2012) have shown that anonymous resumes might enhance women's chances of being hired for jobs where they are typically disadvantaged (e.g. in management-level positions). Thus, future research could further examine the role of relevant outside actors and factors on the career development of women. A second direction for future research is in gender and leadership. Recent research has shed more light on differences between masculine and feminine leadership but has yet to fully grasp the underlying mechanisms of these differences and, more specifically, which of those leadership types are useful under which conditions. It is unlikely that either male or female leadership advantages would be absolute (Eagly, 2016), so a better understanding of a contingency perspective on masculine and feminine leadership, especially related to how this might affect individual careers, would be a potentially valuable next step in this area of study (Post, 2015). A final suggestion is mostly a paradigm shift that needs to take place. Joshi *et al.* (2015) recently reviewed the literature on gender in *Academy of Management Journal* and formulated several calls to action for future research. Their first was to not view gender diversity as a women's issue only but to take a broader perspective that also explicitly includes the role of men. For example, we should not only examine the role of caregiving responsibilities in career development among women but also among men. Taking this broader perspective would move the field further by providing a more complete and contemporary understanding of the interaction between gender and careers.

Trending topic #9: personality

Personality is still a major topic in the scholarly debate on careers, as demonstrated by its ninth place on the trending topic list. Most of the studies focused on well-known personality

traits, such as the Big Five (e.g. Arora and Rangnekar, 2015; McIlveen and Perera, 2016; Spagnoli and Caetano, 2012; Wiernik, 2016), core self-evaluations (e.g. Da Motta Veiga, 2015), proactive personality (e.g. Lau *et al.*, 2013; Presbitero, 2015), and trait emotional intelligence (e.g. Di Fabio and Kenny, 2012; García and Costa, 2014). Other studies included personality traits that are less widely researched, such as grit (e.g. Jordan *et al.*, 2015) and perceptiveness (e.g. Gentry *et al.*, 2013). Interestingly, some of the key issues in contemporary personality research, such as the debate on different personality traits vs one overarching personality factor was not visible in the published papers in the career journals. This makes sense, though, as the primary domain of personality studies in OB is likely the trend setter in terms of the research agenda on personality, and thus these trends might still cross over to career studies in the years to come.

Personality is typically examined as a predictor or moderator of career-related processes and outcomes. Furthermore, it is studied among many different target groups – such as young adults – and in different target areas – such as Eastern Asia. Interestingly, the vast majority of papers focused on well-known personality types, with the five-factor model being the most popular one. This could indicate that the topic of personality – within careers – has not changed all that much. At the same time, it is also possible that although personality traits by themselves have not changed a lot, the context in which they are researched (e.g. testing the validity of personality models in Asia), and the role they play in contemporary careers (e.g. traits such as grit that become more important in an increasingly complex career), might be shifting. In total, 89 out of 693 papers assessed and/or discussed the topic of personality in some way. There were clear differences between the journals in terms of emphasizing this topic, as it was the #6 trending topic in *JCA* with 44 out of 215 papers (20.5 percent), yet it was ranked much lower in the other journals. Indeed, for *JCD* (nine papers; 5.8 percent) and *CDQ* (nine papers; 6.9 percent), it only barely passed the 5 percent criterion to be a trending topic. *CDI* was in between with 27 papers (14.1 percent) including personality.

The role of personality traits as predictors of various types of career-related outcomes has been well-documented. Most of those studies have implicitly assumed that personality traits are stable, non-changing aspects of an individual, and thus have a stable effect on careers regardless of participant age or career stage. However, recent studies have indicated that personality traits – most notably the Big Five personality traits – can and do actually change over the lifespan (Roberts *et al.*, 2006) and that they can be altered through interventions (Roberts *et al.*, 2017). This offers an important impetus for future career research, as it suggests that personality is at least partially malleable and could, therefore, have different effects on career development at different points in time. To empirically test this would, of course, be a major challenge, as it would require long-term longitudinal studies, but it could be a significant addition to the literature on personality and career development. Such longitudinal effects might even, to a certain extent, be reciprocal in the sense that changing personality characteristics could change one's career motivation and aspirations, but certain major career events could also impact one's personality. We would encourage careers scholars and personality scholars alike to further explore this avenue of research. A second valuable direction for future research would be to follow recent trends in personality research with regard to methods of measuring personality. Most notably, recent studies (e.g. Sackett *et al.*, 2017) have argued that using only self-reports for studying personality dynamics may limit our understanding of this phenomenon, and we should complement this with other-ratings (e.g. colleagues, friends) and implicit measures (e.g. implicit association tests) to provide a more complete and valid representation of one's personality and its role in individual behavior. We argue that this would also be a valuable development when studying personality in relation to career development, and it would offer a fresh perspective on how personality might have a role to play in the way individuals manage and develop their careers.

Trending topic #10: career mobility

The trending topic of career mobility focuses on mobility in terms of career transitions, as well as in terms of international careers. Thus, papers in this category focus on being mobile in one's career either through transitioning into a (new) job or through physically changing locations. In terms of the former, this mainly includes career transitions (e.g. Ghosh and Fouad, 2016; Liu *et al.*, 2012) – including school-to-work transitions (e.g. Monteiro *et al.*, 2015; Popadiuk and Arthur, 2014) and retirement transitions (e.g. Maggiori *et al.*, 2014) – and boundaryless careers (e.g. Gubler *et al.*, 2014; McElroy and Weng, 2016). In terms of the latter, it concerns topics such as expats (e.g. Yao *et al.*, 2014) and migration (e.g. Al Ariss and Crowley-Henry, 2013). Much of the careers literature since the 1990s has focused on career mobility, especially with the rise of the boundaryless career paradigm. However, given recent advancements in that particular theory – noting that mobility can be physical as well as psychological – and given the rise of related topics such as career capital and employability, it is notable that career mobility “only” came in as the #10 trending topic. This suggests a shift in career research overall, although career success, of course, was still the #1 trending topic, which is also a long-standing core careers topic.

Career mobility is usually considered to be more of an overarching framework, rather than a study variable. Although transitions and mobility can be measured – and have been measured – the career mobility themes mostly served as a relevant context or explanatory framework in career-related research. For example, many studies examined what were the crucial antecedents and outcomes during major career transitions (e.g. school-to-work transition and retirement transitions), without explicitly including those transitions as a study variable. Overall, 86 studies focused on career mobility in some way, half of which were published in *CDI*. Career mobility was not in the top five trending topics of *JCD* (19 papers, 12.2 percent), *CDQ* (13 papers, 10.0 percent), and *JCA* (ten papers, 4.7 percent) but was featured relatively often in *CDI* with 44 papers, making it the #3 trending topic for this journal. This is once more a clear indicator of *CDI* having displayed a somewhat different focus compared to the other three journals because career mobility was relatively popular in *CDI* (and career success, career decision making, and career capital less so), whereas it was much less popular in *CDQ*, *JCA*, and *JCD* (where career success, career decision making, and career capital were much more popular).

As mentioned above, most studies focusing on career mobility focus on this trending topic as a paradigm, for example, studying boundaryless or protean careers. Furthermore, most studies have examined the antecedents and outcomes of certain career transitions either before or after they take place and, as such, focus on single status changes in careers. However, an in-depth understanding of the transition processes themselves seems to be mostly missing. For example, in terms of school-to-work transitions, Brzinsky-Fay (2014) argued that researchers typically overlook important aspects of these transitions because they focus on single events rather than continuous processes. In addition, a clear theory about contemporary school-to-work transitions is still lacking (Akkermans *et al.*, 2015). These notions can be generalized to career mobility, and most specifically career transitions, quite easily as they imply that research on transitions should not exclusively focus on single status changes but rather on processes that unfold over time, and which include factors before, during, and after the transitions take place. Hence, future research in the area of career mobility might advance the state-of-the-art by providing both theoretical and methodological innovations. For example, conceptual papers are needed to build theory on different types of career transitions, methodological papers might advance the way we measure and analyze such transitions, and empirical papers could longitudinally explore and test career transitions, not just as single events but rather as continuous processes. A second important avenue for future research is related to late-career mobility. Recent years have shown an increasing momentum for studies on motivation to continue working

and retirement decisions (e.g. Akkermans *et al.*, 2016; Beehr and Bennett, 2015; Post *et al.*, 2013), yet there is still a clear gap in our knowledge on mobility during later career stages (Wang and Wanberg, 2017). Popular belief among older workers is that the chances of changing careers are low and many of them tend to “sit out their remaining time” until the end of their professional working lives (cf. limited future time perspective; Carstensen, 2006). Yet, scientific knowledge in this area is mostly missing. First, future research would need to elucidate key factors that can determine whether and how individuals might be mobile during their late careers. Second, recent studies have argued that the post-retirement phase is becoming a career stage of its own (e.g. Wöhrmann *et al.*, 2014) and it would be fascinating to further examine career mobility before and after retirement. Taken together, future research on career mobility might provide more complete ways of studying career transitions, especially related to both early and later career transitions.

Trending topic #11: culture

Culture turned out to be the #11 trend in career research. This topic is typically discussed in terms of cross-cultural comparison, for example, comparisons of career attitudes (e.g. Lee *et al.*, 2016; Hansen and Leuty, 2012), personality traits (e.g. Fan *et al.*, 2012), and aging and retirement (e.g. Lytle *et al.*, 2015). However, intracultural research was also featured regularly. For example, with respect to the African American culture, papers focused on career aspirations (e.g. Brown and Segrist, 2016), and work values and socialization (e.g. Toyokawa and McLoyd, 2013). Furthermore, American subcultures are a much-discussed topic among the articles, for example, including research on Asian or African Americans and how their cultural heritage influences their choices and chances with regards to careers. Moreover, several papers focus on immigration and its impact on careers such as racial barriers and cultural factors that influence immigrant populations at work (e.g. Chen and Fouad, 2013; Stebleton and Eggerth, 2012).

Culture is typically used as a contextual factor impacting career development, and to cross-validate existing models and concepts in various cultures (e.g. testing whether knowledge on career success from the USA would also apply in a Chinese cultural context). In some cases, though, culture – or more specifically cultural adjustment – is described as a predictor (In, 2016) and mediator (e.g. Cao *et al.*, 2013) in career decision making. Though culture does not make the top ten list of the trending topics, it can still be considered a highly relevant theme in the career research of the past five years. In total, 69 out of the 693 papers (10 percent) focused on the influence of culture with respect to careers. Remarkably, almost one out of five papers in *JCD* had a cultural scope, which makes culture one of the top five trending topics of this journal. In the other three journals, the topic of culture was less popular. In *CDI* and *JCA*, 7.8 and 7.9 percent of the papers covered the topic of culture, respectively; in *CDQ*, only 5.4 percent of the articles focused on a cultural dimension, thereby barely passing the criterion to be considered a trending topic.

The focus of many studies that have examined culture was to examine whether accepted theories and findings would also hold up in a different context. Especially the Asian – and most clearly the Chinese – context was featured often in those papers (also see below: “Various trends: samples and countries”). This is a valuable development that could teach us a lot about the validity and generalizability of the theories and models we use in our scholarly work. A next step would be to expand this further and to empirically test these accepted models in different contexts other than western and Asian contexts. Most notably, testing these models and theories in an African context would be a valuable next step as this is a part of the world that is rarely explicitly featured in careers’ papers. One reason might be that topics such as career self-management and career capital are not a direct priority in some of those countries, as many people are struggling to survive and unemployment rates are often dramatically high. At the same time, though, many African countries continue to

industrialize and are, therefore, likely to be confronted with similar issues in the domain of career development that many developed countries have recently faced. It would therefore be fascinating to better understand the processes underlying their career development, thereby taking into account the unique characteristics of countries and regions, as there are of course major differences between African countries. A second important future research direction relating to culture and careers is the topic of migrant workers. In recent years, especially between 2014 and 2016, the flow of migrant workers from various parts of the world toward western – especially European – countries has significantly increased and has greatly impacted the (western) labor markets. Future research should attempt to better understand how career paths of refugees and migrants develop, and which factors are the key in these processes. As a link with the topic of identity (see below), the literature has not yet succeeded in identifying the antecedents and mechanisms of immigrants' career decisions and identity (Dheer and Lenartowicz, 2017), and this would be a concrete opportunity for scholars to research. One concrete step in making this happen is a current call for a *CDI* special issue on "The impact of the global refugee crisis on the career ecosystem," which is planned to be published in 2018-2019. Whereas the first two suggestions for future research focus on testing existing theories and models in new contexts and with new target groups, a third suggestion would be to build new theories and models. It is likely that at least some of the existing theories in management and OB – also in case of research on culture – will not hold for certain populations in certain contexts, and this implies that we need to think about theoretical models that help to understand career development among different cultures. Although a lot of papers in the four career journals have cross-validated existing models in various cultures, an in-depth reflection of why certain theories and mechanisms would be similar or different across these cultural contexts is often missing. Therefore, this would be an important next step when using culture as an explanatory framework for career-related phenomena. As a possible starting point, a recent special issue on the changing world of work (Barley *et al.*, 2017) provided some early theorizing that also included some reflections on the specific role of culture in career development, and we would urge scholars to consider this emerging research and use it to further shape our ideas of the role of various cultural elements in theory building on contemporary career development.

Trending topic #12: social capital

The relevance of social capital for individuals' career success and choices is acknowledged by the fact that this topic has been included in almost 10 percent of the career papers of the past five years. There are two main streams of literature within this trending topic. First, social capital is often discussed in terms of networking. For example, networking is defined as a career strategy that is crucial for career success by developing relationships from the start of one's career to secure future potential sponsors (e.g. Kim, 2013). Networking is also considered important to escape unemployment and to facilitate job search (e.g. Hatala and Yamkovenko, 2016). Furthermore, research connects social capital to the Big Five personality factors, explaining why specific personality types may cause individuals to experience barriers to networking (e.g. Wolff and Kim, 2012). Second, social capital was researched in terms of the influence of social ties on career decision making and career success. Examples include family influence on careers and on career decision making (e.g. Fouad *et al.*, 2016), and the role of parental support for career decisions and career well-being of young adults (e.g. Pesch *et al.*, 2016).

Social capital – both in terms of networking and social ties – was examined in various ways but mostly as a predictor variable, mostly arguing that having a strong network and social ties can enhance career mobility and success. In some studies, social capital variables such as networking skills and social support were used as moderators and mediators.

All in all, social capital is thus mostly framed as a necessary condition for successful career development. Although the topic of social capital did not make the top five list in any of the journals, overall, it received attention in a total of 68 papers (9.8 percent). Compared to the other three journals, *CDI* had a slightly higher percentage of 13.0 percent with a strong focus on social networks and its impact on careers. While *JCD* (10.9 percent) and *JCA* (8.4 percent) did not deviate too much from the average percentage, in *CDQ* only 6.2 percent of the papers were dedicated to the topic of social capital. However, we should note that *CDQ* had a remarkably high share of papers dedicated to mentoring and counseling (22.3 percent), which shows some conceptual overlap with the theme of social capital.

We see two clear opportunities for future research in the domain of social capital. First, the papers that were published in the four career journals mostly focused on social support and networking in terms of self-perceived constructs. We would propose that career researchers might use recent technological and methodological innovations such as social network analysis (Scott, 2017) and text mining (Kobayashi *et al.*, 2017a, b; Wu *et al.*, 2014) to complement this existing knowledge. These methods can enhance our understanding of the role of social capital in career development by mapping actual social networks and using existing (big) data sets to explore how social capital influences people's behavior in their work and careers. As the majority of existing research is based on attitudes and perceptions, using these innovative tools would complement existing knowledge by offering a statistical, data-driven approach in addition to the existing theoretical, conceptual approach. Closely related is our second suggestion for future research, which is to integrate not only recent innovations in technology and methodology but also the increasingly important role of social media networks. Professional and social network sites such as LinkedIn, Facebook, and Twitter are gaining ever more relevance for career-related topics such as career decision making, job search, and recruitment and selection practices. However, our knowledge of the role of these social media networks in career development is still very limited. There is quite some emerging research on the role of social media in organizational behavior and careers (e.g. Benson *et al.*, 2014; Ellison *et al.*, 2014), yet this has mostly been published in journals that focus on ICT and technology (e.g. *Computers in Human Behavior*). Thus, the emphasis of such papers has been on the technological aspects of social media but they have not been firmly integrated with the existing OB and careers literature yet. We argue that this is a fascinating and important challenge for career researchers, as the role of social media is likely to increase further in the years to come. Possible avenues for research would be to examine the advantages and disadvantages of online social capital compared to "real-world" social capital that is built on face-to-face interactions, the role of online social capital in finding employment, and being hired for a job (e.g. applying via LinkedIn or being head-hunted based on one's social media profile), and potential differences of online vs offline social capital for different generations of workers (e.g. Generation Y and Z who are entering the labor market vs older employees closing in on their retirement age). All in all, we propose future research in the area of social capital to integrate recent technological, methodological, and societal trends to further enhance our knowledge of the role of social capital in contemporary career development.

Trending topic #13: identity

Number 13 on the list of trending topics is the topic of identity. The majority of papers belonging to this trending topic focused on the phenomenon of vocational identity and its development and impact over the course of careers. The underlying rationale in these studies was that vocational identities provide a framework of individual career histories and trajectories (e.g. Gupta *et al.*, 2015; Shin and Kelly, 2013; Rhee *et al.*, 2016) that are likely to influence career decisions and pathways. An individual's vocational identity is a highly complex and developmental construct. For example, researchers discussed multiple

dimensions, including the individual cognitive domain, the relational component, and the role of behaviors and experiences of forming one's vocational identity. Identity was also part of discussions in other, related topics, including leadership (e.g. Liu *et al.*, 2013), aging (e.g. Cheung and Wu, 2014), and the integration of immigrant populations at work (e.g. Stebleton and Eggerth, 2012).

The topic of (vocational) identity was usually included either as an antecedent of career decision-making processes and career mobility or as a conceptual framework that helped make sense of individual career development. In case of the former, identity-related constructs were empirically tested in studies, for example looking at the role of identity in career decision making and career success. In case of the latter, identity was more of an explanatory mechanism to help understand why individuals make certain decisions in their careers. Overall, we found 51 papers (7.4 percent) over the past five years that focused on identity, which were quite evenly distributed across the five years. While the percentage of papers on identity was relatively even in *CDI* (5.2 percent), *JCA* (7.4 percent), and *JCD* (7.1 percent), *CDQ* had a relatively high share of paper on identity (10.8 percent).

The identity research of the past five years in the career journals primarily focused on the identity of the individual with respect to career trajectories. Looking at future research opportunities, in times of fast-paced developments in businesses and careers, it would be particularly interesting to research how (pro)actively managing one's vocational and career identity could help individuals to cope with times of change (e.g. Olins, 2017). Recent research has shown that having a strong sense of identity is paramount in adapting to innovation and strategic change (e.g. Nag *et al.*, 2007; Snihur *et al.*, 2016). Therefore, it would be important to broaden the scope of identity research by taking into account, for example, the role of corporate identity on career strategy and coping with change (e.g. Abratt and Mingione, 2017), and potential contradictory identities within and between individuals (Brown, 2017). Based on a systematic literature review, Atewologun *et al.* (2017) recently proposed an integrative framework for analyzing identity in a 2×2 matrix featuring the dimensions of stable vs evolving and content vs context. This framework might be a fruitful start for future research in identity and careers, as it allows for a broad scope that goes beyond exclusively focusing on the antecedents and outcomes of individual-level career identities. A second suggestion for future research in the field of identity would be to apply a more critical and complete approach to studying the topic. Knights and Clarke (2017) argued that much of the identity literature tends to: take identity for granted as an inherent part and priority for individuals, and invent "new" perspectives that seem to forget existing theorizing in the field. They specifically mention the example of career studies, which they state would benefit from being more critical and historically aware. Based on this reasoning, we would encourage researchers in the field of identity to further explore – both in theoretical and empirical ways – what career and vocational identities actually are, how they might differ between and within individuals, and how they might evolve over time and across social spaces. Integrating the vast amount of research on identity that is available in management and organization studies would greatly benefit this endeavor and help career scholars to move forward with their research on identity and career development.

Trending topic #14: meaningfulness

As mentioned in the Introduction of this paper, the recent societal debate on work and careers has increasingly focused on meaningful work. Both professionally and personally, we were therefore anxious to see whether meaningfulness would also have entered the scholarly debate on careers during the past few years. Indeed, we found that meaningfulness was the #14 trending topic in the four career journals. The papers that belong to this category focus in various ways on the meaning and value that people attach to their work, rather than a more instrumental focus on "getting the job done."

Prominent topics were meaningful work in general (e.g. Allan *et al.*, 2016; Steger *et al.*, 2013; Stebleton, 2012), calling (e.g. Creed *et al.*, 2016; Duffy and Dik, 2012; Zhang, Dik, Wei and Zhang, 2015), mindfulness (e.g. Andrews *et al.*, 2014; Zivnuska *et al.*, 2016), and sensemaking (e.g. Lysova *et al.*, 2015).

Although meaningfulness was found to be a trending topic, it came in “only” at the 14th spot with a total of 48 published papers (6.9 percent), which was somewhat surprising given the momentum the topic has gathered in the media and the professional debate. There was not a clear sign of either a downward or upward trend during the past five years as the number of published papers on this topic remained quite stable. The distribution of papers among the four journals was worth noting, though, as in *CDI* (3.1 percent) and *JCD* (3.9 percent) this topic would not have been classified as trending at all, in *CDQ* (5.4 percent) it barely made the criterion, but for *JCA* (13.5 percent) it was at #7. One clear explanation for this difference is that *JCA* published a special issue “Work and calling: research and practice” in 2012, which featured eight papers specifically focused on calling and meaningfulness. However, even when not taking this special issue into account, *JCA* still published about three times as many papers on this topic compared to *CDI* and *JCD*. It will be interesting to see how the topic of meaningfulness will develop during the next few years. Even though we could not see a clear increase in published papers between 2012 and 2016, we do expect that this topic will gain additional momentum in the careers literature, especially now that the worldwide economic crisis has mostly passed and the topic seems to be entering the mainstream careers debate.

Meaningfulness is still quite a nascent topic in the scientific literature, and therefore there are many interesting questions to answer in this domain. First, there is a need for research on antecedents, moderators, and mediators in relation to meaningful work. For example, which key factors could contribute to developing a calling or to experience one’s work as meaningful? There is some emerging research in this area, for example, that helping others can enhance one’s feelings of meaningfulness (Allen *et al.*, 2017) and that career adaptability might enhance calling (Guo *et al.*, 2014), yet this is still only an emerging understanding and more research is needed to fully understand how meaningful work can be built and fostered. Closely related to this suggestion is the need for intervention studies that can provide a better understanding of whether meaningfulness can be directly enhanced, and if yes, how this can be achieved (Duffy and Dik, 2013). Thus, future research in this area might develop and empirically test interventions aiming to increase feelings of meaningful work and calling among individuals. Another important future research direction would be to study unfolding processes of meaningful work. In terms of methodology, this implies that more longitudinal research is needed to study how perceptions of meaningful work and calling develop over time, and to examine their dynamics. For example, Elangovan *et al.* (2010) argued that we need to study multiple callings and examine whether these might develop in sequences or rather that several callings can co-exist at the same time. These authors also pointed out that it would be crucial to adopt a critical perspective on meaningful work and calling, as it could have a “dark side” as well, for example, if individuals are too much set on one specific calling, this could lead to an escalation of commitment and ultimately to unfavorable career outcomes. Hence, taken together, there are a lot of relevant questions to answer, for example, related to better conceptualization of the concepts, more knowledge on antecedents, moderators, and outcomes, more research on the process of meaningful work over time and, ultimately, stronger theory building in this area.

Trending topic #15: work-home interaction

The topic of work-home interaction is an example of a bridge topic between careers and several other fields of research, such as occupational health, gender, and OB studies. Studies in this category focus on the ways in which multiple domains (i.e. work, home) interact in

multiple ways (i.e. work-to-home and home-to-work) and have different effects (i.e. positive and negative). The most prominent topics were work-home conflict (e.g. Kulik *et al.*, 2016; Lau *et al.*, 2013; Molino *et al.*, 2015), work-home enrichment (e.g. Dishon-Berkovits, 2014), work-home balance (e.g. Carvalho and Chambel, 2016; Clarke, 2015), or a combination of those three as they obviously share many similarities in their approach and conceptual focus. Another topic that appeared in the journals – and which is closely related to the trending topic on gender – is that of working mothers and fathers, and the balance they search for in their work and careers (e.g. Robinson *et al.*, 2016).

Work-home interaction is typically used as an antecedent of various outcomes in the published papers about this topic. Generally, studies examine how either a positive or a negative work-home interaction might impact, for example, well-being, performance, and career success. Interestingly, the topic of work-home conflict was clearly a part of more studies than the topic of work-home enrichment, indicating that – at least in the debate on career development – the more traditional focus on conflict/interference between the two domains is still more prominent than a mutually enhancing perspective. In total, 42 papers (6.1 percent) were published on this topic, which means it just passed the 5 percent criterion for being a trending topic. These papers were quite evenly distributed among the journals as *CDI* had 13 (6.8 percent), *CDQ* had five (3.9 percent), *JCA* had 12 (5.6 percent), and *JCD* also had 12 (7.7 percent). The topic remained stable between 2012 and 2016, indicating that work-home interaction is a steady and stable part of the careers scholarly debate.

Our first suggestion for future research is to provide even more conceptual clarity in this field of research. The literature still uses many different terms for studying essentially the same phenomenon: work-home, work-life, work-family, and also terms such as interaction, balance, and interface. This is not a problem *per se*, as scholars in this area are aware of these different terminologies and tend to integrate them in their work. However, it would be important for future research to further elucidate what these terms exactly mean and how they might be changing (Perry-Jenkins and Wadsworth, 2017). For example, the term “family” or “home” might have a different meaning now than it did several years ago, and these terms likely do not mean the same to everyone. The same goes for the term “work,” because – as we have described earlier – the very nature of work is changing rapidly. Thus, critically reflecting on the definition of the interaction between the work and home/family domains, and providing new theory and empirical tests of these interactions in today’s rapidly changing career landscape would be an important next step for future research in this area. The changing world of work also fuels our second suggestion for future research, which is to study a larger array of contexts when examining work-home interaction. Most of the existing research in this area has – usually implicitly – taken the traditional perspective of the “employee in their organization” as the foundation of their research, both in terms of theorizing and empirical testing (Allen and Martin, 2017). However, given the rise of, for example, contingency work, gig work, self-employment, and project work, it is likely that existing conceptualizations of the work-family interface might not be easily applicable for such groups of workers. Also, it underlines that conflict and enrichment between the work and family domains may be significantly different across various types of employment (and types of families as well). In sum, we encourage scholars to further clarify the concept of work-home interaction/work-family interface by taking into consideration potential differences between occupational groups and families, and by broadening the scope from the traditional employer-employee relationship toward including more contemporary types of employment.

Trending topic #16: proactive behavior

The final topic that passed the 5 percent threshold was proactive behavior. Papers in this category focused on work-related and career-related behaviors that were self-initiated

and voluntary. Some of the major topics within this category were general career-related proactive behaviors (e.g. Hirschi *et al.*, 2014; Hirschi and Freund, 2014), career self-management (e.g. De Vos and Segers, 2013; Okay-Somerville and Scholarios, 2014), and job crafting (e.g. Brenninkmeijer and Hekkert-Koning, 2015; Lichtenthaler and Fischbach, 2016; Petrou and Demerouti, 2015). Within this topic, we see two clear streams of literature that are closely connected. On the one hand is the literature on career self-management, and on the other hand is the literature on general proactive behavior that has crossed over from psychology and OB literature. Whereas the former was dominant in the careers literature during the 2000s, it was less published about between 2012 and 2016. Contrarily, research on proactive behaviors such as job crafting seems to be on the rise, especially during the past two to three years.

Interestingly, although concepts such as career self-management and proactive career behaviors have, as mentioned above, been at the fore of the scholarly debate on careers ever since the 1990s and most clearly during the 2000s, the topic of proactive behavior only barely made the criterion for being a trending topic with 41 published papers (5.9 percent). Furthermore, although the papers focusing on career-related proactive behaviors were quite evenly distributed among the journals, it was clear that work-related proactivity was virtually only published in *CDI*. Indeed, the topic of job crafting – which has gained a lot of momentum in psychology and OB – only started to emerge in 2015 and was only published in *CDI* until now. In terms of trends, this signifies that whereas the literature on career self-management seems to be on the decline, the crossed-over literature from OB and psychology is on the rise in career studies.

The topic of proactive behavior has focused almost exclusively on individual-level behaviors and outcomes thus far. This makes sense, as proactive behavior is – by definition – self-initiated and voluntary behavior of an individual. However, the effects of such proactive behaviors are likely to reach further than only that particular individual performing the proactive behavior. Rather, such behaviors will likely also influence colleagues and team members. Indeed, recent empirical research has started to examine how team-level job crafting can impact outcomes (Tims *et al.*, 2013) and how social networks can influence job crafting behaviors (Bizzi, 2016). Although this example is specifically tailored to the topic of job crafting, it can be applied to proactive behaviors in work and careers more broadly, as there is a clear interaction between one's proactivity and the boundary conditions provided by the context (Hong *et al.*, 2016). In terms of future research, we therefore argue that further exploring the interplay between individual proactivity and contextual factors is a crucial next step. For example, studies might examine how leaders' attitudes and behaviors impact employees' proactive behaviors, how one person's job crafting might impact other team members' work, how individual proactive behaviors are rewarded or discouraged by certain organizational systems (e.g. incentive systems, HRM policies), and ultimately how this interplay relates to work and career outcomes. A second avenue for future research would be to study proactive behaviors over time and examine unfolding processes. This does not only imply that we need longitudinal designs when studying proactive behaviors but also that scholars need to look at process models of proactivity. For example, Anseel *et al.* (2015) argued that there is a major gap in research on such process models with regard to feedback-seeking behaviors, and that future research needs to enhance our understanding of how proactive behaviors develop over time, interact with other stakeholders, and possibly generate reciprocal chains of proactivity. Finally, we hope that future studies on the crossed-over forms of proactive behavior in one's work will not just be used in career studies as an added variable but actually be integrated into career theories and models. That is, some studies have examined, for example, the role of job crafting in employability and career success (e.g. Akkermans and Tims, 2017) but have not built theory on how such proactive behaviors might impact career development in

a broader sense. Such theory building would further enhance our understanding of both career development and proactive behavior at work. Taken together, studying proactivity in context, over time, and integrated with career theories and models should provide crucial new insights in this field of study.

Various trends: samples and countries

Next to the trending topics discussed above, there are several contextual variables that are worth mentioning due to their numerous appearances in the analyzed papers. First, several papers focused on a specific country or region in which the study was performed. Often, the purpose of these papers was to validate whether theories could be generalized across countries and contexts (which is closely related to the trending topic of culture, except these papers specifically focused on a country, not *per se* on culture). Examples include theories and models such as the social self-efficacy inventory in China (Fan *et al.*, 2012), boundaryless careers among women in the Middle East (Afiouni, 2014), and the notion of calling among Chinese college students (Zhang, Dik, Wei and Zhang, 2015; Zhang, Hirschi, Herrmann, Wei and Zhang, 2015). Among all articles, we found 93 papers that specifically addressed certain countries or regions to test their hypotheses. Remarkably, 57 percent of the geographic-specific papers referred to Asian countries, of which 29 percent related specifically to China. One clear example of this trend is that in September 2016, *CDQ* dedicated a special issue to “Career development and intervention in Chinese contexts.” Generally, among other topics, research in China focuses on career decision making (e.g. Zhao, 2012), career mobility (e.g. Yao *et al.*, 2014), and attitudes (e.g. Zhang, Dik, Wei and Zhang, 2015; Zhang, Hirschi, Herrmann, Wei and Zhang, 2015). Behind Asia as the most regarded region within the research of the past five years, the Americas were subject of 18.3 percent of the papers dedicated to specific regions, dominated by the USA with 9.7 percent. European countries were referred to in 12.9 percent of region-specific papers with Italy as the most discussed country (3.2 percent), specifically addressing issues of career decision making (e.g. Ginevra *et al.*, 2012; Ferrari *et al.*, 2012). Arab and Middle East follow with 6.5 percent, while Africa only received attention in 3.2 percent of region-dedicated papers.

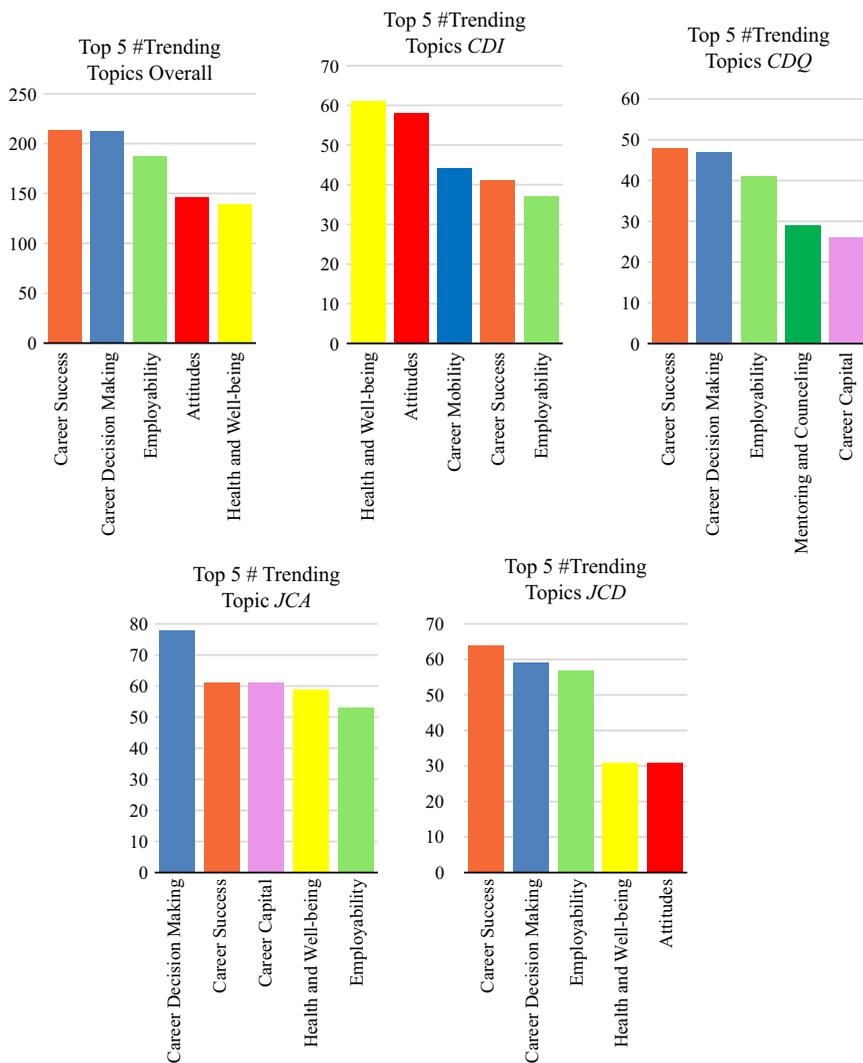
Second, besides the interest in geographic regions, researchers also focused on specific contexts in terms of educational sector and occupational industry. For instance, students and young workers (e.g. Monteiro *et al.*, 2015; Popadiuk and Arthur, 2014) and entrepreneurs (e.g. Almeida, Ahmetoglu, and Chamorro-Premuzic, 2014; Obschonka *et al.*, 2012) were regularly featured as focal groups. Furthermore, careers in science, technology, engineering, and mathematics (STEM) were often examined. Specifically, the choice, motivation, and success to pursue a career in STEM were discussed in a 4.3 percent of all articles (e.g. Major *et al.*, 2012; Moakler and Kim, 2014).

Looking back and looking forward at #trends in careers

Our review of all 693 published papers in *CDI*, *CDQ*, *JCA*, and *JCD* resulted in 16 trending topics, which we have described in detail in the previous section and which are also shown in Table II and Figures 1 and 2. Below, we will reflect on these trending topics, mention some topics that were surprisingly not part of the list, and also look forward at additional possible future trends in careers.

A look back at the trending topics

Taken together, we can conclude that the list of 16 trending topics contains both traditional topics that have been part of the debate for a long time and newer topics that seem to have gained momentum over the past few years. With regard to the former, career success and career decision making came in at #1 and #2 trending topics and were overall clearly the



Notes: Orange, career success; light blue, career decision making; light green, employability; red, attitudes; yellow, health and well-being; dark blue, career mobility; dark green, mentoring and counseling; pink, career capital

#Trending topics in careers

Figure 2. Top five trending topics in total and per journal

most published about topics. Hence, although the debate on careers might be shifting toward meaningfulness, proactivity, and integration with other fields such as OB and occupational health, at the core of the debate are still the topics that have been there for many years. We did see some shifts within those topics, though, for example, career success becoming clearly more focused on subjective indicators rather than objective indicators, and with career decision making seemingly focusing more on individualized career paths rather than on a more traditional approach on career stages. Thus, although the topics themselves are not new, their focus certainly seems to be changing over the years. Not all traditional

career topics were at the top of the list, though, with especially career mobility coming in only at #10. There might be a recent trend in which the traditional paradigm of looking at career transitions might be losing momentum because of the recent rise of research on personal resources and competencies in career development. Although not mutually exclusive, it would make sense that the contemporary debate on how individuals use their personal resource to navigate their careers might currently start to take precedence over the traditional discussion on mobility in terms of transitions in themselves.

There were also clear indications of new topics that were published about a lot in the past five years. The clearest example of this is employability, which came in at #3. Although the concept of employability has existed since the 1950s, and it started to gain momentum in the 2000s, it seems that the field is starting to mature in recent years. Different perspectives (e.g. competence-based, perceived, graduate) may still exist, but they are no longer completely isolated and researchers have begun to search for stronger theoretical arguments and to look for moderators and mediators. Thus, it would seem that employability is on its way of becoming a core part of the scholarly debate on careers. This is especially interesting because studies on employability are performed at the crossroads of careers, OB, and psychology, which is something that has been called for by several top scholars in the field. Besides employability, though, none of what we could frame as “contemporary topics” – such as meaningfulness and proactive behavior – ended up very high on the list of trending topics. Although meaningfulness (#14) and proactive behavior (#16) made the list, we had expected these topics to be much more popular. For proactive behavior, we saw a decline in studies on career self-management over the years, but a rise of new proactivity research (e.g. job crafting) since 2016. This might indicate that there has been an ongoing shift of emphasis in the field of (career) proactivity research that could show itself in the next few years. In terms of meaningfulness, we did not see a change in popularity between 2012 and 2016. Perhaps the societal debate on meaningfulness still needs to cross over to the scholarly debate, which would mean that the topic might rise in popularity during the next few years.

Finally, we observed that the vast majority of papers were empirical in nature, and the vast majority of those empirical papers used quantitative data. As this is not part of any of the “about this journal” descriptions on the journal websites, this is actually quite remarkable. It could be that conceptual papers on careers are targeted at journals that focus more on this type of papers, such as *Academy of Management Review* or *Human Relations*. Yet, the number of conceptual papers about careers in those journals is also not spectacularly high, so it seems that conceptual papers about careers – and qualitative papers as well – are rather scarce. Although we are certainly not voicing a formal opinion of the four journals that we analyzed, we would hypothesize that we could bring the field of careers forward if we would include more conceptual and qualitative papers – to complement rather than replace quantitative studies – and we would expect that all four journals would certainly be open to that.

Comparison between the journals

CDI, *CDQ*, *JCA*, and *JCD* are – as their names clearly indicate – all journals that specifically focus on careers. Indeed, some of the trending topics were clearly trending in all four journals. For example, career success and employability were in the top five trending topics of all of them. In addition, career decision making and attitudes were in the top five for three out of four journals. All in all, most of the topics that made the 5 percent criterion for being a trending topic in general (i.e. across the four journals) also made this criterion for each journal separately. These results indicate that for a significant part, there were clear trends visible for all four journals, thereby indicating that the careers field as a whole is characterized by similar trends.

However, there were also some key differences between the journals. For example, some of the topics that were trending in general did not pass the 5 percent criterion for specific journals, such as meaningfulness (not trending in *CDI* and *JCD*), proactive behavior (not trending in *CDQ*), and career mobility (not trending in *JCA*). Furthermore, the emphasis of topics was clearly different in some instances. For example, career counseling was a topic that was only highly popular in *CDQ*. As another example, whereas career mobility was not a trending topic in *JCA* and only reached about 10 percent in *CDQ* and *JCD*, it was featured quite prominently in *CDI* with over 20 percent of published papers focusing on this topic in some way. This latter example shows a general trend of differences: *CDI* seems to have had a rather different focus in the past few years compared to *CDQ*, *JCA*, and *JCD*. To illustrate, whereas *CDQ*, *JCA*, and *JCD*, in general, seem to have focused more on “core” careers topics, *CDI* covered a more diverse range of topics, which is illustrated by having health and well-being as the #1 trending topic in that journal. This trend of *CDI* having a larger number of different topics is also visible in the percentages per journal as the #1 trending topic for *CDI* was part of 30 percent of all papers, whereas for the other journals it was between 36 and 41 percent, indicating they have a few core topics that have been featured especially prominently. The clearest example of this is *CDQ*, in which there are five core topics that have been heavily featured, whereas the other trending topics were much less popular. One explanation for the difference between *CDI* on the one hand vs *CDQ*, *JCA*, and *JCD* on the other hand, might be that *CDI* seems to attract authors predominantly from Europe and Asia (and also the USA), whereas *CDQ*, *JCA*, and *JCD* are predominantly focused on a US target group. Apparently, there are some differences in focus between those regions in terms of what they publish most.

Non-trending topics

So far, we have focused on topics that actually turned out to be trending during the past five years. However, compiling such a list also led us to reflect on topics that were not trending despite their reputation and popularity in the scientific literature.

One of the most surprising topics to be absent in the list of trending topics was unemployment and job search. Although this topic could be considered an OB/psychology topic just as easily as a careers topic, we had expected this stream of literature to be more prominently featured in the career journals. However, only 20 papers (2.9 percent) covered unemployment and/or job search. This is especially surprising considering the worldwide economic crisis that was still in full swing in the past five years, especially between 2012 and 2014. One possible explanation for the relative absence of this topic in the career journals might be that papers about job search and unemployment are directed more toward psychological and vocational journals rather than career journals. Indeed, a quick scan of the published papers in *Journal of Vocational Behavior* between 2012 and 2016 shows that this journal alone has over 30 published papers related to the topic (compared to 20 combined in all four career journals). Still, exploring ways in which unemployment can be prevented and job search processes can be optimized would seem to fit the scope of career journals quite well and it is therefore surprising that this was not a trending topic. As we have suggested earlier, integrating the job search literature with the careers literature more firmly seems to be a valuable opportunity for future research.

Another topic that we had expected to be part of the list was aging and retirement. Although some of this topic was captured in the career mobility trending topic – which also included work-to-retirement transitions – there were barely any papers specifically focusing on topics such as motivation to continue working and older workers. Similar to job search and unemployment, the reason for the small number of studies on this topic in the career journals might be that the topic has spread out to other journals. This might especially apply to aging and retirement, as there are dedicated journals that specifically focus on

these issues, such as *Psychology and Aging*, and *Work, Aging & Retirement*. At the same time, these late-career decisions and motivations would seem very relevant for the scholarly debate on careers and thus it would seem valuable to make sure that this discussion will continue to exist in this field (see also our future research suggestion in the career mobility trending topic).

Some other topics that were not part of the trending topics list but that we might have expected to be part of it were leadership, talent acquisition, and diversity. First, leadership has been a major topic in several fields for quite some years now. It would make sense that the role of the leader is also crucial for career development of individuals, especially when studying employees working in organizational contexts. Yet, as discussed earlier in this paper, considering that the role of the context has decreased in research on careers, this might also explain why leadership is not a trending topic: apparently, the individualization of the field of career studies also applies here. We should note, though, that 19 papers (2.7 percent) were published about leadership, of which 15 were published in *CDI* (7.8 percent). This would make leadership a trending topic for that journal. Second, talent acquisition was only published in 11 papers (11.6 percent) between 2012 and 2016. Of course, this topic would primarily be considered an HRM topic, yet recruiting and selecting individuals for jobs seems quite an important topic when studying career development, which relates closely to, for example, career mobility (e.g. when transitioning a new job, someone needs to be recruited and selected) and career capital (e.g. the career competencies necessary to be attractive to employers). Third, the topic of diversity was not a trending topic in the career journals. As discussed earlier, there were actually quite some studies focusing on a specific target group or a specific context, and diversity was regularly represented in gender studies (i.e. gender diversity). Yet, these studies usually covered these characteristics in isolation, primarily focusing on a particular context (e.g. STEM workers, Chinese context) rather than actively reflecting on the topic of diversity. However, given the increasingly diverse labor market, it would seem important to understand diversity – in a broad sense, not just cultural or gender diversity – and its role in career development. All in all, we call for more research on the role of these three topics – leadership, recruitment and selection, and diversity – as part of the scholarly debate on careers as we argue that they can be important for enhancing our understanding of the field.

A look forward: what is next?

We have formulated directions for future research for each of the trending topics earlier. Here, we would like to formulate a number of additional topics that we believe have the potential to become (more) trending in the next few years and that are not specifically related to any of the trending topics that we described earlier.

First, a potential trend in careers literature is the “comeback” of the context. As noted in the introduction to this paper and as illustrated by the results of our review, the main focus of recent career papers has been on individual career management and individual career success. However, there have been recent attempts at bringing back the organizational and societal context in scientific research on careers (e.g. Clarke, 2013; Rodrigues *et al.*, 2015; Tams and Arthur, 2010). For example, Inkson *et al.* (2012) argued that scholars need to include structural (i.e. meso- and macro-level factors) when researching careers, such as – but certainly not limited to – demand and supply of labor in different industries on the labor market, and formal organizational practices and policies. In addition, the paradigm of the sustainable career, which was recently brought forward by De Vos and Van der Heijden (2015) explicitly defines “social space” as one of four core indicators of a sustainable career. This is an especially interesting debate in light of the changing employer-employee relationships (Guest, 2004; Rubery *et al.*, 2002), which have caused a new dynamic in the way that employers are responsible for and managing the sustainable careers of their employees.

To illustrate, given the rise of temporary and contingency work, the ways in which organizations will deal with career development issues have changed significantly, yet despite generally shorter tenures and more flexible work, there is still a responsibility for them in developing their staff. Indeed, having a talented and flexible pool of employees adds to the human capital value of organizations and, ultimately, to their competitive advantage (Bowen and Ostroff, 2004). Hence, we see an important discussion in the scientific literature on careers that features the changing employer-employee relationship, and its role in managing sustainable careers, thereby bringing back the role of context in the scientific debate on careers.

A second direction in career research that seems promising – but which has received very little attention to date – relates to the role of unexpected events that impact one’s career development. A paradox in the recent literature on careers is that while virtually all studies emphasize increasing complexity and unpredictability of contemporary careers, those studies all implicitly adopt the perspective of the “makeable” career in which individuals can become successful if they self-manage and craft their careers. Although this is certainly true and valuable to study, exclusively focusing on the “makeable” part of careers does not capture the full complexity of contemporary career development. Indeed, some recent studies have called for more research on major chance events that impact individuals’ careers (e.g. Bright *et al.*, 2005; Holtom *et al.*, 2005), and a few empirical studies have followed suit (e.g. Hirschi and Valero, 2017; Seibert *et al.*, 2013). Better understanding the role of such career shocks would indeed seem to be an important challenge that can significantly contribute to the scholarly debate on careers. For example, conceptualizing what career shocks are, which types of shocks might occur among different target groups, and examining the consequences of such shocks on work-related and career-related outcomes would complement and add to our understanding of the “makeable” part of careers by further exploring in which ways the less predictable and less controllable aspects during individuals’ lives impact their career paths.

A third potentially valuable direction for future career research would be to focus on the “dark side” of career development. As Baruch and Vardi (2016) argued, research on careers has mostly taken a positive perspective, in which careers are ultimately a good thing, and that anyone can reach positive career outcomes when they gain the necessary resources and competencies. In addition, although the literature on organizational deviance and misconduct has gained some momentum recently (Palmer, 2012), this has not quite crossed over to the careers domain yet. However, the existing predominantly positive outlook on careers ignores the many potential negative aspects of contemporary career development, such as major layoffs and increasing job insecurity. Also, it is not quite clear what happens if individuals are not employable, proactive, competent, and adaptable. Therefore, we would urge career scholars to further investigate the dark side of career development. For example, it would be important to find out what the role of certain dark personality traits (O’Boyle *et al.*, 2012) or destructive leadership (Schyns and Schilling, 2013) would be on the career development of individuals. Also, it would be interesting to research what happens if people do not become employable, or are not entrepreneurial and proactive in managing their career: do they all lose their jobs? Will they be less happy and satisfied? Will their career success be diminished? Such questions offer fascinating opportunities for research that have been largely overlooked in the recent career literature. We therefore encourage career researchers to include both the positive and negative aspects of career development in their studies in order to obtain a more complete picture of contemporary careers.

Finally, we would call for more interdisciplinary research in the field of careers. At first glance, this may seem contradictory to our findings because topics such as attitudes, health, and well-being were all trending topics, seemingly pointing at a clear existence of

interdisciplinary research. However, we would argue that most of those studies were actually multidisciplinary, that is: they have been published in the four core career journals yet often did not fully integrate insights from the different disciplines (i.e. there were combined in one study but not fully integrated on a theoretical/conceptual level). For example, many of the studies on health and well-being were relevant for the careers journals because they included one or several career variables – and some of the papers did not and thus were actually more monodisciplinary – rather than theorizing or testing true integrative research on careers and OB, on careers and occupational health, and so forth. To be clear, we are not suggesting that all research in the field of careers should be interdisciplinary, because monodisciplinary and multidisciplinary research is important in its own right. What we do argue is that most of the current research is mono- or multidisciplinary and we need more true interdisciplinary research to further our understanding of contemporary career development. We see clear opportunities for (re)integrating the fields of sociology (e.g. integrating macro-level insights of labor market stratification), psychology (e.g. enhancing career theory with psychological mechanisms), management (e.g. integrating organizational design principles, institutional theory, or entrepreneurship theory into career development), and also other disciplines (e.g. educational sciences research, project management research), and we hope that future studies will capitalize on these opportunities. Ideally, we would adopt both an “inside out” and an “outside in” approach, meaning that careers scholars can learn from other disciplines and that scholars in those disciplines can learn from ongoing debates in the careers literature.

Conclusion

In this paper, we reviewed all published papers between 2012 and 2016 in *CDI*, *CDQ*, *JCQ*, and *JCD*. Based on these 693 papers, we found 16 trending topics in the careers literature of the past five years. For each of these topics, we presented a brief description with some metrics on their popularity, and we formulated suggestions for future research. Furthermore, we reflected on non-trending topics, on similarities and differences between the four journals, and we put forward four additional suggestions for future research that might enrich our understanding of contemporary career development. We hope that our review and future research agenda will inspire scholars and practitioners in pursuing future studies and taking the field of career development another step further.

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Further reading

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Corresponding author

Jos Akkermans can be contacted at: jakkermans@vu.nl

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