

Current thinking on contemporary careers: the key roles of sustainable HRM and sustainability of careers

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This paper approaches the sustainability of careers, departing from contemporary views on sustainable Human Resource Management (HRM) and key concepts in the current career literature. Recently, the notion of sustainable careers has gained attention as a key perspective on contemporary careers and is assumed to be critical for the resilience of individuals in an increasingly complex and unpredictable career environment. Viewing careers as an ecosystem in which several actors (individual, organization, labor market) are involved, this paper reviews current thinking on sustainable HRM to elaborate our thinking on sustainable careers. We highlight pertinent challenges for realizing continuity in careers that are: Firstly, becoming increasingly longer and less predictable; secondly, in general, less bounded to one organizational context and characterized by new ways of working; thirdly, putting an increased responsibility on the individual career actor; and finally, that have moved from a socially shared view on the meaning of career success as steady progression to a focus on personal meaning. We conclude that further research is important for understanding how different actors within the career ecosystem can help to ensure that the conditions for sustainability are met in view of creating a more resilient career system.

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Introduction

As a contribution to the Special Issue on Learning and Innovation in Resilient Systems, this paper approaches the sustainability of careers, departing from contemporary views on sustainable Human Resource Management (HRM) and key concepts in the current career literature. Sustainability of careers is important for individuals' career success, for organizational performance and for optimal functioning of the labor market [1^{**}, 2^{**}, 3, 4^{**}]. Yet, in an increasingly global and rapidly changing socio-economic environment, traditional views on careers, built on the premise of long-term job security and steady career progress within one organization in exchange for loyalty and hard work, no longer hold [5^{*}, 6, 7]. This poses challenges for all actors and stakeholders involved and raises questions as to how a resilient career system can be built that allows individuals to develop a satisfying career that fits with their personal needs and builds on their talents, and that, at the same time, allows organizations to flexibly respond to changing market requirements by having an engaged and adaptable workforce [8, 9]. Moreover, from a sustainability perspective, the question about how a system that aligns the needs of all parties involved can be developed is critical, thereby considering not only the short-term outcomes of career decisions but also their impact on outcomes in the longer run. For instance, how can individuals build a sustainable career by doing short-term project-based work, or how to avoid that taking care of family responsibilities come at a cost in terms of future career prospects? Given the increasing amount of new forms of employment, comprising categories such as self-employed, one-person employers, dependent independents, own account self-employed or free agents [10], a large variety of career patterns is seen. In addition, more and more non-standard work arrangements such as part-time, fixed term, temporary or teleworking form the basis for nowadays' organization of work [10, 11]. Obviously, careful attention for sustainable career development taking into account all kinds of different ambitions, affinities, opportunities, preferences and abilities is needed. This comprises a non-normative (or idiosyncratic) framework as nobody can decide for anybody else how an optimal career is shaped. That is to say, people may have totally different answers to career-related questions and may attach highly different values or meaning to different career patterns and outcomes [12].

Sustainable HRM can be an important vehicle for realizing sustainable careers. We summarize the major evolutions in this field in the next paragraph. This is followed

by a review of key concepts in the contemporary or career literature. We then highlight four major trends which we propose to have important implications for future research on sustainable careers in view of creating a career-resilient workforce.

Sustainable human resource management

During the last 30 years, Strategic Human Resource Management (SHRM) emerged as a dominant approach to Human Resource Management (HRM), however, during the last decade a new approach labelled 'Sustainable Human Resource Management' (Sustainable HRM) has turned up [13**]. Sustainable HRM entails that the debate regarding sustainability of organizations and of people working in these, initiated by the Brundtland report [14], has intensified. In addition, over time, the global market has witnessed important changes in the nature of work that employees and organizations alike have to deal with constantly, such as more knowledge-intensive contents of work, rapid technological changes, constant innovations, and more flexible workplaces and time schedules [15*]. As a consequence, key concepts such as quality of working life and employee well-being have become part of the HRM literature as well for many years, over and above organizational-level outcomes [16]. The need to take into account both multiple stakeholder perspectives (individual employees, their relatives, and organizational parties involved) and positive and negative environmental and social/human contextual factors involves tensions given the co-existence of different interpretations of sustainability. Think for example about governmental and societal constraints across countries, such as official retirement age and health insurance policies, that impact labor market opportunities as well, over and above individual and organizational determinants. In addition, the way vocational educational institutions prepare individuals for the future labor market may differ considerably from country to country, yet, also influences their possibilities for sustainable career development.

Responding to the need for incorporating a sustainability perspective in HRM, two directions for policy and research have been proposed [13**]. At a macro-level, HRM may contribute to the societal discussion about corporate sustainability and social responsibility [13**,17]. At a micro and meso level, the focus is on the internal processes of HRM, in view of the observation of scarce human resources, of aging workforces, and of increasing work-related health problems, thereby underscoring that the sustainability of the HRM system itself becomes a 'survival strategy' for organizations who are dependent on high-quality employees [13**].

Whilst earlier scholarly work in this field was predominantly focused on the long-term survival and viability of organizations, and on their future orientation, later studies focused on the use of the tools of HRM to create a

workforce that has the trust, values, skills and motivation to achieve a profitable triple bottom line [18**]. As such, over time, a variety of terms have been used to refer to the link between HRM and sustainability, think for instance about the terms 'sustainable HRM' [19*,20], 'HR sustainability' [21], and the 'R(espect) O(penness) C(ontinuity) model' of sustainable HRM [22], to mention but a few. What they all have in common is their explicit or implicit recognition of the human/social outcomes of HRM, both positive and negative ones [23,24]. Moreover, empirical research in this field explores the impact of HRM on financial, social/human and ecological/environmental outcomes proposed by the Brundtland Commission. More specific, Wilkonsson, Hill and Gollan (2001) defined sustainable HRM as 'long term socially and economically efficient recruitment, development, retention and dis-employment of employees' (p. II) [25]. Other definitions in this field focus on the long-term survival, on the viability of organizations, and on a future orientation [13**].

One domain in which the potential relevance of sustainable HRM has become particularly important in recent years, is the domain of sustainable careers [26**]. A career is typically defined as 'an evolving sequence of a person's work experiences over time' (Arthur, Hall, and Lawrence, 1989, p. 8) [27]. Careers are not only important for the individual career holder, but also for their organizations that depend on their human capital to ensure sustainable performance [28]. For instance, the co-occurrence of both aging and dejuvenization of the workforce [29,30] urges employers to focus on finding ways to 'sustain' aging workers (with vulnerable groups being no exception) into a prolonged working life wherein their employability is safeguarded. As such, sustainable HRM can thus be an important vehicle for sustainable careers. Workers that are enabled to enjoy tailor-made HRM practices have better chances to develop the most 'up-to-date' knowledge and skills, and to continuously build up new expertise requirements, that is, to become more employable [31*]. Next to individual worker's health and vitality, protecting and enhancing one's sustainable employability is an important ingredient of sustainable careers and deserves ample attention.

Approaches to sustainable careers

The above-mentioned changes in the global labor market have caused a substantial change in the nature of what is understood by a 'career': the linear, predictable and single lifelong employment within one organization, a model held for decennia, is no longer the standard career pattern for many workers [27,31*,32]. Rather, the contemporary or new career is considered as non-linear, unpredictable, transitional, unique and personal [2**,7,33]. At the same time, individuals' careers do not develop in the vacuum of the private context [2**,34**] but are affected by the multiple contexts in which they unfold; the organizational

context as well as the broader labor market, the policy measures taken by governments, educational institutions' practices, and initiatives from labor market intermediaries. As such, careers are part of a wide eco-system which operates across internal and external labor markets and in which work and employment relationships define careers and their outcomes [1,3]. In recent years, due to trends such as globalization and technological evolutions, this eco-system has become more dynamic. To fully understand contemporary careers, we have to rethink and reshape the existing ways by which we define, manage, and support careers as their sustainability does not rely on their stability but on their resilience, that is, their ability to adjust, develop and fit an ever-changing work environment [4**].

Sustainable careers refer to 'sequences of career experiences reflected through a variety of patterns of continuity over time, thereby crossing several social spaces, characterized by individual agency, herewith providing meaning to the individual' (Van der Heijden and De Vos, 2015, p. 7) [12]. The core of this definition does not differ substantially from the definition of 'a career'. However, although all careers involve a sequence (or sequences) of work experiences over time, this sequence might not be equally sustainable for each individual and there are many factors which might impact this sustainability throughout the course of the career. As mentioned by Lawrence, Hall and Arthur (2015), the idea that careers reflect the continued employment of individuals in jobs that facilitate their personal development over time has been the underlying ideology of careers research for a long time. However, up until now, this philosophy has largely remained implicit [26**]. The notion of enhancing the individual worker's employability and through this protecting one's sustainable career at the contemporary labor market explicitly addresses the factors that facilitate or hinder the continuity that individuals experience in their careers, thereby taking a multiple stakeholder perspective and a long-term focus into account. In that sense, the sustainability of a career should not be considered as a static outcome of career ambitions, preferences, affinities, abilities and decisions, nor is it an indicator of career success. Rather, a sustainable career inherently entails a *process* or *dynamic* perspective, thereby considering how individuals' career choices and the ways in which all parties involved deal with careers affect the extent to which careers are sustainable over time and generate new opportunities for suitable employment in the future through renewal, flexibility and balance [34**] (Figure 1).

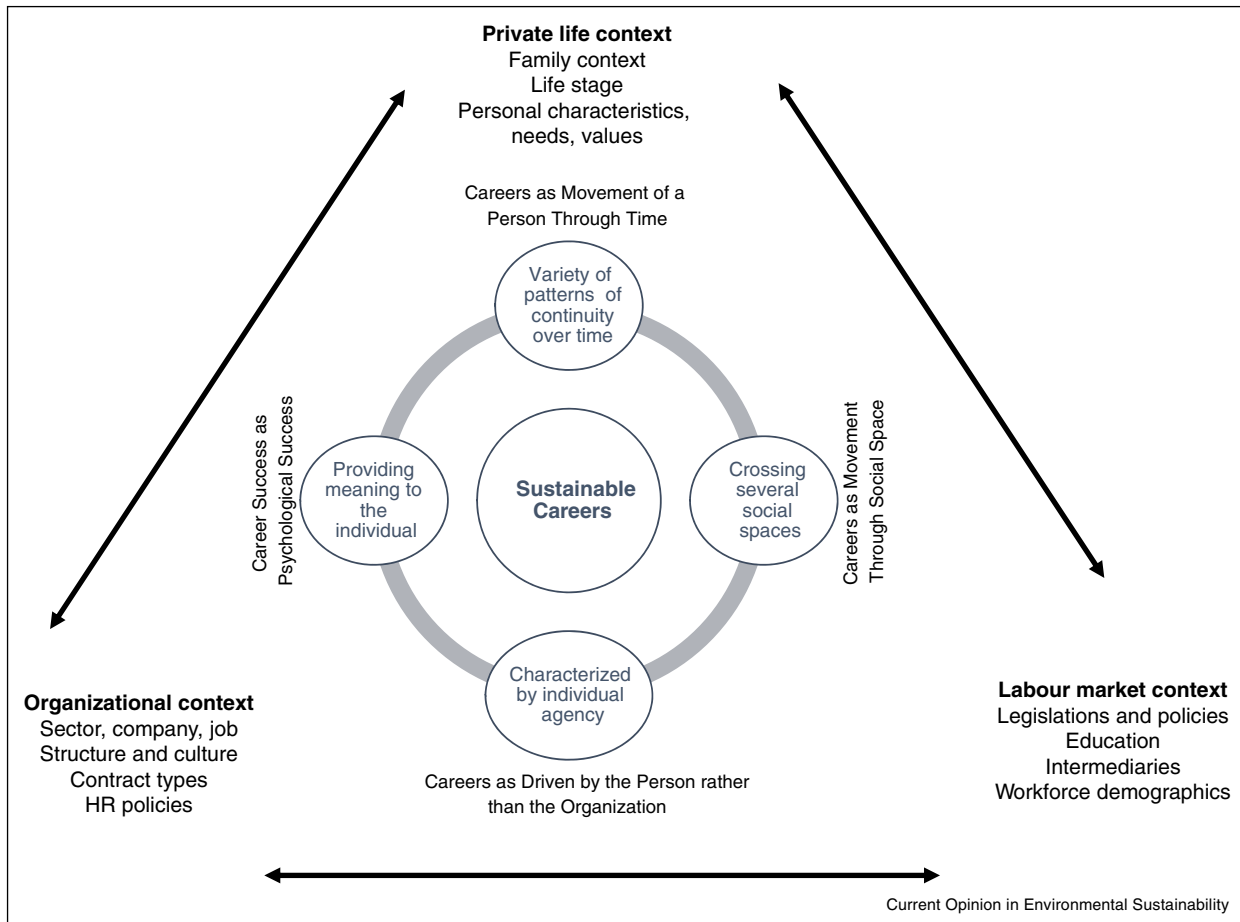
Building on the general notion of sustainability, sustainability in careers thus implies protecting and fostering (rather than depleting) human and career development. The rich variety of possible sequences of experiences making up an individual's career implies that we may encounter examples of both 'positive spirals' wherein

career episodes become more enriched over time, and 'negative spirals' wherein career episodes may be characterized by, for instance, demotivating or unrewarding experiences [12]. Moreover, what might appear to be a 'successful' or 'satisfying' career in the short run does not always have to be or remain so in the long run, and one employee might feel satisfied with a certain type of career while this might be lacking challenges for another one. The latter refers to the earlier notion of career development following a non-normative (or idiosyncratic) framework [12].

A sustainable career has four essential characteristics [2**,34**,35**]: (a) is successfully integrated into a satisfying personal and family life that fits with one's career and life values, and one's preferences and affinities; (b) provides employees a sense of sufficient security, that is, to find employment, in order to meet economic needs and well-being; (c) comprises flexibility and capacity in career choices to suit one's changing needs and interests over time; and (d) is characterized by renewability such that an individual has regular opportunities for renewal of domain-specific and generic knowledge and skills [36*] in order to combat obsolescence of his or her capabilities and herewith to protect one's sustainable employability. Together these elements provide the ground (and herewith the potential) for continuity as articulated in the definition of sustainable careers given above, thereby recognizing the importance of different stakeholders involved in person's career.

As such, the sustainable career concept is related to, but different from, other concepts that are central in current thinking on careers: protean career, boundaryless career, and employability. The protean career refers to the career as a process driven by the person, not the organization [37*,38*]. The protean career orientation (PCO) expresses the individual's attitude towards developing their own definition of what constitutes a successful career and taking action to achieve those outcomes as well as the motivation to adapt to a changing environment [37*,38*]. Research shows a positive association between PCO and objective and subjective career success [39–41], managing insecure job settings [42] and re-employment of unemployed individuals [43,44], suggesting that individuals can impact their careers and various career outcomes through their own actions. However, up to now, empirical work on the PCO concept puts little focus on the continuity in careers over time (time dimension), the possible trade-offs between short versus long-term outcomes (personal meaning dimension), or on the role of contextual influences (social space dimension) and the multiple stakeholders involved (agency dimension). Including all four dimensions is needed in order to enable a fresh perspective on careers that recognizes its complexity. Whilst individual agency and personal meaning are central to the protean career concept, adding long-term

Figure 1



Sustainable careers (based upon Van der Heijden and De Vos [26**]).

implications of career choices, their meaning for the individual employee, and contextual constraints can yield further insights into the sustainability of careers.

In a similar vein, the concept of boundaryless careers suggests an independent stance of individuals towards their career as it encompasses moving across the boundaries of separate employers, drawing validation and marketability from outside the present employer, being sustained by external networks or information, breaking traditional organizational assumptions about hierarchy and career advancement, rejecting existing career opportunities for personal or family reasons, and perceiving a boundaryless future regardless of structural constraints [45*,46*,47*]. As such, the boundaryless career forms a rich and relevant framework to study sustainability in careers, however, until now, research has often been limited to studying career sequences from the perspective of direct physical mobility (social space dimension), and on linking a boundaryless career orientation to attitudinal outcomes like career success and commitment [46*,47*]

(personal meaning dimension). Adding a sustainability perspective here would provide a more nuanced picture of how stakeholders within different contexts (e.g., in one’s working organization, one’s broader life sphere, and in the broader societal context) (social space dimension) interact with one another, how these stakeholders have impact on careers (agency dimension) and how they can affect the sustainability of careers over time (time dimension), thereby providing further insight into the role of agency versus structure in careers [48**]. Moreover, the complexity of today’s world calls for the need to take a broader and long-term view (personal meaning dimension), incorporating both stimulating and hindering factors affecting the sustainability of careers over time.

Therefore, we incorporate a more recent but growing line of careers research that addresses the concept of employability, that is, an individual’s career potential, which can be regarded as a prerequisite for sustainable careers [36*]. Employability research can be divided in input-based and outcome-based approaches [49*]. First, the input-based

approach puts the emphasis on aspects that increase the likelihood of obtaining and retaining a job (be it on the internal or external labor market), such as competencies or personal qualities [36*,50]. In this view, it may be defined as ‘the capacity of continuously fulfilling, acquiring or creating work through the optimal use of competences’ (Van der Heijde and Van der Heijden, 2006, p. 453) [36*]. Second, the outcome-based approach focuses on outcomes that are associated with this likelihood to find employment, such as self-perceived employability or the perceived chances to become employed in a job of one’s preferences [51–53]. Adding the perspective of self-perceived employability to the range of career outcomes, next to objective career success indicators that have been prevalent in research up to now, is another example of how the sustainability perspective might be incorporated in careers research. After all, the capacity of individuals to continuously fulfill their career goals will be dependent upon their abilities, motivation, and opportunities [54] to keep their competencies up to date or to invest in the development of new competencies in view of changing job demands or changing career ambitions. Other stakeholders in the career eco-system can affect individuals’ employability directly (for instance, organizations investing in learning and development of their employees in view of changing job demands), or indirectly through creating supportive measures (e.g., governmental policy-makers providing funding for vocational training).

Crosscutting themes and emerging challenges, and their link with current thinking on careers

On the basis of the review given above, several crosscutting themes and emerging challenges with respect to the issue of sustainability of careers are worth to be mentioned. We summarize these crosscutting themes and their resulting challenges alongside four dimensions on which important changes affecting the nature of careers are taking place (see [Table 1](#)).

Careers as movement of a person through time

The essence of sustainability is that, through conservation and renewal, present needs are being fulfilled without compromising future needs. The cycle of career-related events and decisions comprising an individual’s career over the course of their professional life will determine sustainability of a career in the long run. Considering such changes as decreasing predictability, longer careers, and the shortening of career episodes, it is clear that careers have been changing significantly over the past decades. Many different patterns of continuity are possible for responding to individual needs regarding work and personal life and periods of employment can be interchanged by periods of part-time work, volunteering, unemployment, sabbatical leave, care-giving, and so on. Continuity is preserved by taking into consideration

consequences of career decisions over time, but this requires adaptability and employability-enhancing competencies from individuals, HRM policies that move away from a narrow, linear and age-based perspective on career development, as well as labor market policies that facilitate and support fluent transitions [4**].

Careers as movement through social space

Careers are enacted within and across different types of contexts (work, home, friends, leisure . . .) [2**,27]. Because individual careers no longer follow one specific path or organization, and because the number of choices of organizations, occupations and work locations has become seemingly endless, the career landscape has become more complex. Moreover, the blurring of boundaries between work and non-work has made the ‘career space’ more fluid, and employees face the challenge of managing the boundaries between work and non-work in a way that fits their personal needs. The impact of trends such as New Ways of Working and new types of organizations, dual career couples, and the need to care for elderly parents on employees’ careers need to be investigated further. How can different stakeholders, resided in the individual’s broader social space (such as employers, employees, and one’s relatives), help to protect and enhance sustainable careers across the life-span, despite — or maybe thanks to — these evolutions?

Careers as driven by the person rather than by the organization

How the career develops over time and social space is presumed to be the result of many choices made by the individual owner of the career, not the mere consequence of external influences and constraints stemming from the social space. Sustainability in careers implies that individuals take ownership over their career, thereby striving for alignment between individual and organizational needs, as well as alignment with their broader life context. This is not an easy task as there are many stakeholders involved and sustainability implies a long-term approach. For organizations this requires moving away from top down, organizationally driven career practices to investing in career competencies and creating a context for career self-management [54]. Agency is also a timely topic when considering the sustainability of careers for those groups who are more vulnerable in the labor market (e.g., young workers without qualifications, unemployed older workers, and migrant workers). The latter often experience a lack of agency due to a lack of required (career) competencies, or due to negative experiences encountered when putting agency into practice without the desired result of obtaining a job. When labor market or HR policies simply depart from the assumption that all individuals are capable and motivated to take charge of their own career development, employers risk creating a so-called ‘Matthew effect’ [55] whereby career-competent individuals will embrace this

Table 1

Four dimensions for understanding the challenges pertaining to the sustainability of contemporary careers (based on Van der Heijden and De Vos [26])****1. Careers as movement of a person through time***Trends:*

- Increasing retirement age resulting in longer careers
- Shorter and less predictable sequences of jobs that can be interchanged by periods of part-time work, education, unemployment, care-giving . . .
- Decrease of linear, upward career paths

Challenge for sustainability:

Trade-off between short-term and long-term consequences of career choices

- *For the individual:* Adaptability and employability-enhancing competencies
- *For the organization (Sustainable HRM):* Focus on processes for career development and employability rather than narrow systems for (vertical) growth

Link with current thinking on careers:

Employability literature: importance of safeguarding one's career potential for continuity in careers over time

2. Careers as movement through social space*Trends:*

- Fading of borders between work and private life
- Increase in possible choices to move between organizations, occupations, locations throughout the career
- Rise of alternative work arrangements (contingent workers, freelancers, independent contractors)
- New ways of working

Challenge for sustainability:

Balancing personal needs with those of career stakeholders in several social spaces

- *For the individual:* Think beyond boundaries of current professional context; develop career capital; find ways to manage the boundaries versus spillover between work and non-work in line with personal needs
- *For the organization (Sustainable HRM):* Move away from view on careers as bounded to the organization

Link with current thinking on careers:

Boundaryless career: idea of an independent stance towards one's career regardless of structural constraints

3. Careers as driven by the person rather than the organization*Trends:*

- Growing emphasis on individual responsibility and accountability for career decisions and outcomes
- Decrease in organizationally-driven career management

Challenge for sustainability:

Making individuals competent in navigating their own career in view of alignment between individual and organizational needs

- *For the individual:* develop career competencies (self-awareness and self-management behaviors; awareness of stakeholder needs and contextual opportunities and constraints)
- *For the organization (Sustainable HRM):* provide clarity about organizational needs, invest in the development of employees' career competencies

Link with current thinking on careers (contemporary career concepts)

Protean career: self-directed career orientation

4. Career success as psychological success*Trends:*

- Rising variety of subjective rather than objective career success criteria
- Employability as a prerequisite for attaining whichever meaning of career success

Challenge for sustainability:

Making career choices in line with personal needs and inner values rather than external and predefined norms or success criteria

- *For the individual:* Insight in personal success criteria, how to derive meaning from work, and what is needed for preserving this over time
- *For the organization (Sustainable HRM):* Move away from collective norms about what a successful career entails, engage in dialogues with employees to develop mutual understanding

Link with current thinking on careers (contemporary career concepts)

Protean career: values-driven career orientation

ownership and actively make use of, or demand for, measures that further support their careers. However, a large group of less career-competent individuals, on the other hand, might not feel capable enough of clearly defining what their needs are and what is required from them in terms of further development in order to obtain

work or to remain employable. As a result, for these less career-competent people, the sustainability of their career is put at risk. Therefore, following an inclusive approach, we should further address the question how all individuals can be supported in developing their career competences. In line with our proposed multiple

stakeholder perspective, this ought to be done by aligning both their own personal needs and opportunities and the needs and opportunities stemming from all relevant parties involved as well as their broader context.

Career success as psychological success

The meaning of careers is changing due to the rise of the employability-based psychological contract, implying that career success is no longer only (solely) focused on objective success criteria (e.g., financial performance or number of promotions) but also on subjective ratings (e.g. work-life balance or personal growth) relative to one's internal career anchors, leading to 'psychological success' as the major indicator of career success [56]. The increasingly pluriform workforce, the rising importance of other areas of life, such as 'quality time' with family and friends, and the increasing individualization, to mention but a few, urge us to prevent thinking in categories regarding retirement age, career peaks, career success or learning needs [57]. What psychological success entails to an individual can vary depending on his/her career stage or broader life context and thus individuals themselves and their important stakeholders (using a non-normative (or idiosyncratic) framework) need to have a good understanding of what matters to them. Yet, at the same time, underlying this new view on career success is that employability has become a critical vehicle for attaining whatever type of subjective success criterion that individuals might strive for. This requires individuals thus to develop insight into their personal needs and opportunities as well as into the needs and opportunities that their surrounding contexts and the constant changes occurring therein entail. To be able to derive meaning from their professional activities throughout their career, continuously investing in the development of competencies in view of sustained employability is critical. Hence, to realize psychological success, it is not only important to know one's personal success criteria, yet to also understand the changing requirements for successful performance in one's job or occupational field. As mentioned above, this is not a sole individual responsibility but requires efforts from other stakeholders (governmental policy-makers, educational institutions, HRM representatives, and relatives and friends) as well. We argue that, from the perspective of sustainable and inclusive HRM, all categories of employees should receive attention, and throughout their life-span; core employees (permanent), periphery employees (temporary), and external workers (free agents). In addition, workers with all kinds of contracts [58,59] should be incorporated. Across the globe, and in all kinds of working organizations, the inequality in treatment between categories of workers has resulted in elaborate, delicate, and 'tough' discussions between employers and labor unions. We believe that a too narrow focus on core workers only endangers the flexibility, organizational performance, and sustainability in the long run, not only at a company level but also in the society at large.

Conclusions and directions for future research

Given the dynamic nature of careers, sustainability might have strategic potential as a key concept for careers, and superimposing the perspective of sustainability to careers might allow us to better understand what is sustainability at work, how we can foster sustainability at work, and which determinants (at the individual, job-related, organizational, and societal level) play a role in maintaining and further developing sustainable careers. The challenge of sustainability encompasses much more than individual career management and requires taking a multiple stakeholder perspective.

From a work floor perspective, organizations — and their HR departments — have a crucial role to play in safeguarding the well-being and development of their employees which they, in addition, need to balance with organizational needs and goals [60]. This makes career management a critical area for sustainable HRM. Moreover, sustainability is a societal issue in terms of the aging workforce and ways to keep both young and older employees active and motivated at work [12], which requires from policy-makers to work out measures that facilitate ample engagement of both individuals and organizations in building a resilient career system.

We thereby call for an inclusive approach that is directed to all categories of workers, and with all kinds of employment contracts, throughout their life-span, and that is applied in both theory and empirical work, as well as in practice aimed at enhancing healthy, prosperous, productive, and challenging careers that are beneficial for all parties involved. Sustainable careers are built upon the notion that they should allow individuals to have positive career experiences over the long-term in ways that promote organizational and individual effectiveness [61]. First, this implies that a mutual understanding between employee and employer (in particular direct management parties) is key in order to respond to the earlier mentioned pluriformity of the workforce and to align individual aspirations, capabilities, and expectations regarding work and private life with the employer's goals and expectations. Research dealing with what careers look like, how people manage their careers, how employers attempt to support or rather hinder this are core issues in this regard. Moreover, it is important to better understand what determines individual workers' commitment to enhance their career sustainability, its meaning and purpose, and how the multiple stakeholders may influence these. Second, while earlier work seems to focus upon professional workers, we advocate an inclusive perspective on careers. Careers are not the exclusive domain of professional workers, but apply to all individuals being part of the workforce, with peripheral and external workers being no exception, and regardless of the type of contract they have. An important research question might be how

individuals from these different categories of workers think about their careers, its meaning and purpose, and in relation to the rest of their lives. It is also valuable to better understand how workers from these categories exert influence over their careers, and to what extent other important stakeholders are influential in this regard. Obviously, challenges with regard to sustainability of careers might differ, for instance depending on the individual's education, occupation/profession or position, yet the notion of careers applies to everyone and this also holds when studying sustainable careers. Third, from a life course perspective, there are challenges pertaining to sustainable careers for individuals in all key stages of the career life cycle: career starters, mid-career employees with care-giving responsibilities and older adults. It is of utmost importance to better understand intra-individual changes in employability and sustainable careers across life stages, its antecedents and its outcomes. As the changes people experience throughout their career are not fixed and comprise a highly dynamic process, individual differences are large, and besides, they increase over the life-span. In addition, change is not continuous, but is rather characterized by turning points, career shifts, and sudden (life) events. Therefore, there is a need for more empirical research with a greater focus on unique intra-individual changes across time. Fourth, measures to support individuals' careers should take into consideration not only the short-term impact but also their long-term consequences. Differently stated, through the ways in which society, organizations and individuals themselves deal with careers they either facilitate the sustainability of careers, or put careers 'at risk'.

Altogether, this requires research that is multi-level, approaching careers from a stakeholder perspective and applying insights from ecosystems and resilience literature. Age-related changes in career-related variables that explain intra-individual changes are needed as well in order to better understand how the sustainability of careers might change over time and across life stages. Moreover, intra-individual changes in perceived employee-employer relationships over time might provide more insight into the role key stakeholders might play in the light of protecting and enhancing the individual employee's career sustainability.

Conflicts of interest statement

None declared.

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