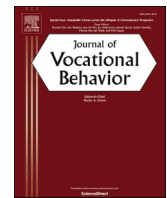




Contents lists available at ScienceDirect

## Journal of Vocational Behavior

journal homepage: [www.elsevier.com/locate/jvb](http://www.elsevier.com/locate/jvb)

# A qualitative exploration of solo self-employed workers' career sustainability<sup>☆</sup>

Sjanne Marie E. van den Groenendaal<sup>a,\*</sup>, Jos Akkermans<sup>b</sup>, Chen Fleisher<sup>c</sup>, Dorien T. A.M. Kooij<sup>a</sup>, Rob F. Poell<sup>a</sup>, Charissa Freese<sup>a,d</sup>

<sup>a</sup> Department of Human Resource Studies, Tilburg University, Warandelaan 2, 5037 AB Tilburg, the Netherlands

<sup>b</sup> School of Business and Economics, Vrije Universiteit Amsterdam, De Boelelaan 1105, 1081 HV Amsterdam, the Netherlands

<sup>c</sup> Maudify & Weku Marketing Solutions, Amsterdam, the Netherlands

<sup>d</sup> Department of Private Business and Labour Law, Tilburg University, Warandelaan 2, 5037 AB Tilburg, the Netherlands

## ARTICLE INFO

## Keywords:

Sustainable career  
Solo self-employment  
Career self-management  
Career self-management patterns  
Enablers  
Barriers

## ABSTRACT

Contemporary labor markets are characterized by rapidly growing numbers of solo self-employed workers who have their own businesses without employing employees. However, research on solo self-employment has almost exclusively focused on the decision to move into self-employment, thereby failing to consider the long-term career consequences of being solo self-employed. To complement existing research, we examined patterns of career self-management strategies among the solo self-employed in light of their career sustainability and enablers and barriers in their unique work context. We conducted 102 interviews among a heterogeneous sample of Dutch solo self-employed workers and identified four career self-management patterns: *proactive crafters*, *adaptive crafters*, *survivors*, and *passive balancers*. We found differences in their career sustainability (i.e., happiness, health, and productivity). Specifically, their happiness is overall sufficient while the level of productivity is mixed, and their health seems to be most problematic. This study contributes to the nascent scholarly literature on solo self-employment and career sustainability. Policymakers can use our findings to promote sustainable careers among the solo self-employed.

## 1. Introduction

Contemporary labor markets are characterized by rapidly growing numbers of solo self-employed workers (Kozica et al., 2014), defined as individuals who independently own a business without employing employees (OECD, 2016). While the growing number of solo self-employed workers is a trend across Europe (OECD/European Union, 2017), the Netherlands is one of the countries with the highest growth (Central Bureau of Statistics [CBS], 2018). In 2010, the Netherlands populated 865,000 solo self-employed, and in 2020, this number grew to 1.3 million (CBS, 2020). Starting self-employment is no guarantee for sustaining the business. Despite the enormous growth in solo self-employment, the Dutch Central Bureau of Statistics revealed that more than half of the solo self-employed

<sup>☆</sup> This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

\* Corresponding author at: Tilburg University, Faculty of Social and Behavioral Sciences, Department Human Resource Studies, Warandelaan 2, 5037 AB Tilburg, the Netherlands.

E-mail addresses: [s.m.e.vdngroenendaal@tilburguniversity.edu](mailto:s.m.e.vdngroenendaal@tilburguniversity.edu) (S.M.E. van den Groenendaal), [j.akkermans@vu.nl](mailto:j.akkermans@vu.nl) (J. Akkermans), [chen@maudifypro.com](mailto:chen@maudifypro.com) (C. Fleisher), [t.a.m.kooij@tilburguniversity.edu](mailto:t.a.m.kooij@tilburguniversity.edu) (D.T.A.M. Kooij), [r.poell@tilburguniversity.edu](mailto:r.poell@tilburguniversity.edu) (R.F. Poell), [c.freese@tilburguniversity.edu](mailto:c.freese@tilburguniversity.edu) (C. Freese).

<https://doi.org/10.1016/j.jvb.2022.103692>

Received 10 July 2021; Received in revised form 3 January 2022; Accepted 19 January 2022

Available online 24 January 2022

0001-8791/© 2022 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

stop their business within five years (58% in 2018, CBS). However, quitting their business might have significant financial consequences because they lack social support structures and pension entitlements. Moreover, they are often underinsured regarding their health insurance, labor disability, and professional liability (Butler & Russel, 2018; Murgia & Pulignano, 2019; Schonfeld & Mazzola, 2015). Despite these alarming signals and the high risk of precariousness, it is problematic that research on building long-term careers in the atypical work context of solo self-employment remains scarce.

So far, entrepreneurship scholars have shown a growing interest in solo self-employment. However, their focus has mainly been on motivational factors to become solo self-employed (e.g., Caliendo et al., 2014) while excluding the long-term career perspective (Burton et al., 2016). In contrast, career scholars have mainly focused on careers in organizational contexts (De Vos et al., 2020), neglecting the individuals with non-standard career paths (i.e., solo self-employed workers) (e.g., De Vos et al., 2020; King, 2004; Lo Presti et al., 2018). Driven by the lack of insights into the long-term careers of solo self-employed workers (Burton et al., 2016), we apply a career perspective on solo self-employment and look beyond the start of solo self-employment. Hence, this study aims to advance the knowledge on how the solo self-employed can shape their career in a happy, healthy, and productive way (De Vos et al., 2020).

Building on De Vos et al.'s (2020) conceptual model of sustainable careers, we argue that the solo self-employed are the central career actors to enhance the sustainability of their career by engaging in career self-management. Career self-management refers to the activities people engage in to manage their careers (De Vos & Soens, 2008). The solo self-employed have a unique career context which provides valuable insights on career self-management for two paradoxical reasons. On the one hand, the solo self-employed, as opposed to standard employees, lack (financial and social) security and support from colleagues and supervisors (Engel et al., 2017). As a result, the solo self-employed lack valuable career resources and have to act as Jack of all trades (Lazear, 2004), meaning that they must find other ways to bear the full responsibility of their own work and build a sustainable career themselves (Frese, 2009). On the other hand, this lack of supervision also offers the solo self-employed ultimate freedom to shape their career according to their own wishes and purpose (Van den Groenendaal et al., 2021). Hence, by acknowledging the solo self-employed as a specific type of entrepreneurs and focusing specifically on their career self-management pictures, we aim to provide new insights on career self-management in a compelling, atypical career context compared to standard employment.

More specifically, we intend to identify patterns of career self-management strategies among the solo self-employed and explore how such patterns relate to career sustainability (De Vos et al., 2020). Furthermore, as the solo self-employed represent a non-standard group on the labor market, this study also considers how contextual enablers and barriers affect their career sustainability. Hence, by exploring career self-management patterns among the solo self-employed, we create a better understanding of how engagement in career self-management may be instrumental for attaining positive career outcomes in the atypical context of solo self-employment. Accordingly, we formulate the following research question: *How do career self-management strategies and contextual factors (i.e., enablers and barriers) relate to attaining a sustainable career in the context of solo self-employment?*

This study contributes to career and entrepreneurship literature in two ways. First, we apply a career perspective to solo self-employment and look beyond the start of solo self-employment (Burton et al., 2016). Specifically, we create a better understanding of how career self-management may be instrumental for attaining positive outcomes in a context characterized by uncertainty and precariousness (e.g., Butler & Russel, 2018). Second, we empirically examine the sustainable career framework developed by De Vos et al. (2020) among a growing non-standard group on the labor market (CBS, 2020). As contemporary careers become more flexible and self-directed (Quigley & Tymon, 2006), our findings on the solo self-employed provide insights on how individuals may enhance their careers' sustainability.

## 2. Theoretical background

### 2.1. Sustainable careers in solo self-employment

De Vos and Van der Heijden (2015) defined sustainable careers as: "the sequence of an individual's different career experiences, reflected through a variety of patterns of continuity over time, crossing several social spaces, and characterized by individual agency, herewith providing meaning to the individual" (p. 7). Building on this definition, careers take different shapes and are characterized by different career self-management patterns, which might not be equally sustainable (De Vos et al., 2020). To better understand what characterizes sustainable careers, De Vos et al. (2020) presented a conceptual model of career sustainability. They distinguished three indicators of career sustainability resulting from a dynamic interplay between individual, contextual, and temporal factors: happiness, health, and productivity. De Vos et al. (2020) emphasized the need for a systemic and dynamic approach, as alignment and balance between the three dimensions (i.e., happy, healthy, productive) is key to attaining a sustainable career. They refer to this alignment by the notion of person-career fit (De Vos et al., 2020). Person-career fit refers to "the extent to which an individual's career experiences are compatible with his or her needs, values, interests, and talents" (Parasuraman et al., 2000: 11). Parasuraman et al. (2000) explain that individuals can achieve a stronger fit by engaging in career self-management.

Though research on sustainable careers is still relatively nascent, previous studies have empirically examined sustainable careers among different target groups. For example, Kossek and Ollier-Malaterre (2020) investigated the role of working hours and workload in attaining sustainable careers in organizational contexts and showed that too much workload could harm career sustainability. Furthermore, Richardson and McKenna (2020) studied career sustainability among professional athletes and showed that resources (e.g., family support and education) support career sustainability. As another example, Baldrige and Kulkarni (2017) demonstrated that individuals who had hearing loss could safeguard their career sustainability by redefining their professional identity. Although these previous studies focused on individuals other than the solo self-employed, their findings serve as a fruitful stepping-stone to advance

our understanding of how engagement in career self-management can enhance solo self-employed workers' career sustainability.

## 2.2. Career self-management in the context of solo self-employment

Career self-management refers to “a problem-solving process by which individuals gather relevant information through career exploration and develop a greater awareness of themselves and their environment, in order to develop career strategies” (Kossek et al., 1998: 938). The solo self-employed have to bear the entire responsibility and vulnerability of developing their business and career (Lo Presti et al., 2018). As such, career self-management may be instrumental in enhancing the sustainability of their career and preventing business failure (De Vos & Van der Heijden, 2015; King, 2004).

Based on research by Engel et al. (2017), who studied career self-management among self-employed individuals, we distinguish two forms of career self-management for this study: *career planning* refers to the cognitive component of career self-management, whereas *career investment* indicates the behavioral element of career self-management (cf. Akkermans et al., 2013; Engel et al., 2017; Lo Presti et al., 2018). More specifically, career planning refers to activities related to career orientation, exploration and reflection, goal-setting, and developing strategies to achieve goals (Akkermans et al., 2013; Engel et al., 2017; Kooij, 2015). Career investment includes actively seeking learning opportunities, learning to develop skills, knowledge, and abilities to prepare for the present and future (Engel et al., 2017), networking (De Vos et al., 2020; Engel et al., 2017), and engagement in hybrid entrepreneurship to manage the vulnerability of solo self-employment (Burke et al., 2008).

One's engagement in career self-management can represent different approaches: it may vary from proactively taking charge to reactively adapting to a situation (De Vos et al., 2020; Frese & Fay, 2001). This proactive or reactive approach may reflect one's motivation to engage in career self-management (Mallin et al., 2014). Kossek et al. (1998) explained that the motivational processes to engage in career self-management have an essential role in understanding how careers evolve. The literature on motivational processes distinguishes between intrinsic and extrinsic motivation (Deci & Ryan, 1985). Intrinsic motivation is defined as the motivation to perform an activity by ‘free choice’ for their own inherent interest, curiosity, satisfaction or joy independent of external pressure or incentives (Deci & Ryan, 2008). Extrinsic motivation is defined as the motivation to execute an activity for their instrumental value and “reasons other than their inherent satisfactions” (Ryan & Deci, 2020, p. 2). Because career self-management is typically considered a self-initiated and self-regulatory process (Hirschi & Koen, 2021), it likely that high levels of intrinsic motivation, driven by an inherent interest and free choice in these activities, should promote such career self-management behaviors (Quigley & Tymon, 2006), resulting in more proactivity. At the same time, though extrinsic motivation may also trigger career self-management behaviors (e.g., a solo self-employed worker who needs more income for their business to survive), it might typically result primarily in reactivity and adaptability (e.g., expanding one's professional network as a response to having lost a customer).

In sum, based on the above arguments, we expect that there will be differences among the solo self-employed in terms of their career self-management strategies. First, the *type* of career self-management may differ between the solo self-employed, specifically in terms of engaging in career planning and career investment (Akkermans et al., 2013; Engel et al., 2017). Second, there are likely differences in the *approach* with which they engage in career self-management, which can be proactive or reactive (De Vos et al., 2020; Frese & Fay, 2001). Third, the *motivational processes* at play among the solo self-employed workers' engagement in career self-management may vary between intrinsic versus extrinsic motivation. These differences will likely result in different patterns of engagement in career self-management. In turn, we propose that such different career self-management patterns are differentially related to solo self-employed workers' career sustainability. To illustrate, De Vos et al. (2019) argued that active self-management of career-related learning cycles is vital for a sustainable career. Furthermore, Hirschi and Koen (2021) emphasized the importance of actively managing work-nonwork boundaries in light of people's career sustainability. Hence, differences in career self-management strategies will likely associate with different levels of career sustainability. In sum, the first sub-question we address is: *Which career self-management patterns exist among the solo self-employed, and how are these patterns related to sustainable career dimensions (i.e., happy, healthy, productive)?*

## 2.3. The role of enablers and barriers in sustainable careers of the solo self-employed

Although individuals are considered the central career actor (cf. De Vos & Soens, 2008; King, 2004), we also consider enablers and barriers in the context of the solo self-employed to understand their career sustainability (Alacovska et al., 2020). Sustainable careers are considered a system in which dynamic processes occur over time (De Vos et al., 2020; Nagy et al., 2019). This systemic perspective encompasses that attaining sustainable careers requires both career self-management by the individual and consideration of contextual factors.

Contextual factors are dynamic forces in the individual's “social, cultural, economic, political, technological and institutional environment” (Edwards & Steins, 1999: 207). Such factors could either be classified as enablers or barriers (King, 2004) and facilitate (i.e., enablers) or hinder (i.e., barriers) engagement in career self-management as well as career sustainability. For example, a typical enabler such as ‘being your own boss’ provides high levels of autonomy to decide upon one's work activities and working schedule. These circumstances might enable the solo self-employed to engage in career self-management and promote their happiness, health, and productivity (Benz & Frey, 2004). Similarly, career-related social resources might serve as enablers to achieve goals, learn from others, and benefit from engagement in networking behavior (Jacobs et al., 2019). In contrast, there may be essential barriers to solo self-employment. For example, high levels of income insecurity (Alacovska et al., 2020), difficulties related to work-life balance (Freese & Van den Groenendaal, 2020), and social isolation (Schonfeld & Mazzola, 2015) might hinder learning opportunities or networking behavior. These barriers will likely decrease happiness, health, and productivity (Freese & Van den Groenendaal, 2020).

Building on the conceptual work of De Vos et al. (2020), we argue that a dynamic interaction exists between the solo self-employed and their context in which engagement in career self-management could be instrumental in attaining sustainable careers. As a result, we expect that the dynamic interplay between the individuals' engagement in career self-management and the enablers and barriers influences career sustainability. For example, a sudden business opportunity that presents itself may be helpful for someone who is proactively crafting their career, as they will capitalize more rapidly on the opportunity than someone who reactively adapts to their circumstances. Similarly, when confronted with an unexpected loss of income, those who are highly anticipative will likely be less negatively influenced than those who find it challenging to prepare for changes.

In sum, the solo self-employed are solely responsible for preparing themselves for future career opportunities and challenges that arise from the context they operate in (King, 2004). As a result, the specific context of solo self-employment may affect how engaging in career self-management leads to favorable long-term career outcomes. Hence, a better understanding of how the solo self-employed attain sustainable careers includes exploring patterns in career self-management and examining the contextual factors that may enable or hinder career self-management and hence the sustainability of their careers (De Vos et al., 2020). We explore these enablers and barriers related to solo self-employment through the second sub-question: *Which enablers and barriers characterize the context of solo self-employment, and how do these contextual factors promote or hinder career sustainability?*

### 3. Method

#### 3.1. Research design and procedure

As the topic of sustainable careers, especially in solo self-employment, is highly complex and is still in its early stages of development, De Vos et al. (2020) call for qualitative empirical research in this area. With qualitative research, we can gain a better understanding of the processes and underlying mechanisms concerning how the solo self-employed cope with the responsibility of dealing with all issues related to their business (Lo Presti et al., 2018) while simultaneously preparing themselves for future career opportunities and challenges (De Vos et al., 2020). Therefore, this research had an exploratory nature using qualitative methodology. By gathering data through interviews, we were able to acquire deeper insights that contribute to a better understanding of the sustainable careers of the solo self-employed (Boeije, 2016). The interviews were semi-structured and based on an interview guide. The semi-structured interview guide provided the interviewer a clear set of instructions and contributed to obtaining reliable, comparable qualitative data (Kallio et al., 2016).

Seven research assistants conducted the interviews. They were trained during a workshop that acquainted them with the semi-structured interview guide. In addition, the research assistants conducted pilot interviews with respondents that were not included in the sample of this study to practice their interview skills and evaluate the interview guide in terms of clarity, relevance, and comprehensibility, and to improve interviewing skills to ensure optimal data collection (Whitmarsh et al., 2007). The first author joined the pilot interviews and critically reflected upon the transcripts, together with the research assistants. Based on the pilot interviews, minor modifications were made to the interview structure to distinguish main questions from probing questions.

To enhance the quality of the data collection, we first gathered background information on the demographics of the respondents by inviting the respondents via e-mail to complete a brief questionnaire a week before the interview took place. This survey was accompanied by a cover letter, which provided information on the research objective, the questionnaire, the interviews, and the data collection's confidentiality. Furthermore, the Ethics Review Board of the university approved the research design and the research tools.

The interviews were conducted face-to-face, or if respondents could not meet in person, via Skype or telephone. Each interview took approximately 60 to 90 min. Before the interviews, the respondents gave their informed consent on their participation and recording the interviews. Each interview began with a brief introduction of practical information, such as the estimated duration of the interview and the guarantee of data anonymity. Subsequently, the respondents were asked to provide a concise description of themselves and their business. Then the respondents were invited to elaborate on why they started their own business and which steps they had taken to build the business and their career. Furthermore, we asked participants about the enablers and barriers they encountered and how they dealt with these circumstances. After discussing how respondents shaped their career as solo self-employed, the respondents were invited to discuss their current situation regarding happiness, health, and productivity (i.e., career sustainability). Finally, the respondents were asked to reflect on their future outlook. They received the interview transcript and were asked to check the accuracy of the data and detect essential missing information.

#### 3.2. Sample

We first applied the purposive sampling method and contacted solo self-employed workers differing in gender, age, occupational group, and business tenure to compose our sample. Purposive sampling refers to the sampling method in which individuals are selected "based on purposes associated with answering a research study's questions" (Teddlie & Yu, 2007: 77). Including solo self-employed workers with different demographics and operating in various occupational groups was necessary, as these demographics might lead to different ways of shaping one's career. For example, construction workers have to deal with other physical work demands than interim HR professionals, potentially resulting in different restrictions to attain sustainable careers (Richardson & McKenna, 2020). Additionally, business tenure was important as previous studies showed that business performance linearly increases with business tenure (e.g., Van Stel et al., 2018) and might promote career sustainability. After purposive sampling, we continued sampling using snowball sampling to enlarge our sample and identify additional respondents. Snowball sampling is a form of convenience sampling

through which respondents introduced other potential respondents who met the sampling criteria (Goodman, 1961). All respondents were approached through social media (i.e., WhatsApp, Facebook, and LinkedIn). The combination of purposive and snowball sampling ensured that the sample's demographics corresponded with the demographic heterogeneity among the solo self-employed population in the Netherlands. To determine the necessary sample size, we applied the comparative method for themes saturation, in which we compared the identified themes across all the interviews in multiple orders. We then reached data saturation (cf. Constantinou et al., 2017) after 102 interviews (see an overview of respondents' demographics Table A in Supplementary Material).

### 3.3. Analyses

The interviews were transcribed verbatim with the use of the ATLAS.ti. A combination of deductive and inductive coding was applied: the deductive approach formed the basis for the analysis, supplemented by the inductive approach. For example, in the deductive approach, existing theories on career self-management and sustainable careers were used to formulate initial codes. These initial codes were based on previous studies on career self-management (see Table B in Supplementary Material) and sub-dimensions of sustainable career dimensions (i.e., feelings of satisfaction, feelings of subjective career success, physical and mental health, and productivity; see Table C in Supplementary Material) (De Vos et al., 2020; De Vos & Soens, 2008; Engel et al., 2017; King, 2004; Kooij, 2015; Kossek et al., 1998; Sturges et al., 2010). The inductive coding process started bottom-up: the codes were directly derived from the data (Benaquisto & Given, 2008) and then applied to explore the enablers and barriers in the context of solo self-employment and identify additional forms of career self-management. A combination of deductive and inductive reasoning is most appropriate when studies are available on a research topic, but there is still room to add empirical evidence (Greco et al., 2001).

All authors were involved in the coding process to guarantee cross-validation. Herein, the first and second authors were in the lead. After coding the data, the approach and the codes were presented to the other authors and thoroughly discussed. The coding process followed three steps based on the coding method of Corbin and Strauss (1990): open-, axial- and selective coding (Boeije, 2016). Each transcript was coded twice to check for consistency and ensure that we did not overlook any significant fragments. The first author carefully read the interview transcripts to determine the relevance of each paragraph for the research aim (Boeije, 2016). Afterward, the first author started with a coding scheme based on the literature on career self-management and sustainable careers (De Vos et al., 2020; De Vos & Soens, 2008; Engel et al., 2017; King, 2004; Kooij, 2015; Kossek et al., 1998; Sturges et al., 2010), and discussed this coding scheme with the other authors. Then the open-coding process started. The initial code scheme was extended with more specific inductive codes of career self-management, such as 'diversifying products/services,' 'expanding products/services' or 'reading' (see Table D in Supplementary Material), and the sustainable career dimensions, for example, 'very happy' and 'physical complaints' (see Table E in Supplementary Material). Throughout this process, similar actions or events described in single sentences, paragraphs, or larger pieces of text were identified and coded using words reported by the respondents (Boeije, 2016; Corbin & Strauss, 1990). This initial coding resulted in 1095 codes. The next step was axial coding, in which we merged codes with similar meanings, and subsequently, more general categories were created (Boeije, 2016). In the process of axial coding, the number of codes was reduced to 712 codes. For example, the code 'investing in relationships' was merged with the code 'networking.' Finally, selective coding was applied.

**Table 1**  
Demographics of career self-management patterns.

	<i>N</i>	Gender (male)	Average age (years)	Occupational groups represented within career self-management patterns	Average business tenure (years)
Proactive crafters	41	24.4%	41.4 ( <i>SD</i> = 10.3)	24.4% beauty worker 2.4% construction worker 14.6% creative worker 24.4% coach/trainer 31.7% HR consultant/professional 2.4% other	8.3 ( <i>SD</i> = 8.0)
Adaptive crafters	32	50.0%	42.6 ( <i>SD</i> = 12.3)	21.9% creative worker 21.9% coach/trainer 21.9% HR consultant/professional 21.9% beauty worker 9.4% construction worker 3.1% other	8.7 ( <i>SD</i> = 6.1)
Survivors	17	100%	39.2 ( <i>SD</i> = 16.4)	82.4% construction worker 11.8% coach/trainer 5.9% creative worker	10.2 ( <i>SD</i> = 10.2)
Passive balancers	12	58.3%	43.1 ( <i>SD</i> = 18.6)	50.0% construction worker 8.3% HR consultant/professional 25.0% beauty worker 16.7% other	14.1 ( <i>SD</i> = 14.9)
Total	102	49.0%	42.2 ( <i>SD</i> = 12.8)	19.6% beauty worker 23.5% construction worker 13.7% creative worker 18.6% coach/trainer 20.6% HR consultant/professional 3.9% other	8.1 ( <i>SD</i> = 8.7)

The data was integrated into theoretical constructs by comparing and refining the categories (Boeije, 2016; Heath & Cowley, 2004). The researchers then developed a matrix in Microsoft Excel with the codes in the first column and the respondents in the first row. For each respondent, an overview was made by ticking the boxes of the codes that applied to that specific respondent. We then created a written summary per respondent in Microsoft Word, which reflected a pattern of career self-management and sustainable career dimensions. Based on these summaries, we identified four career self-management patterns.

## 4. Findings

### 4.1. Career self-management patterns among the solo self-employed

We identified four career self-management patterns that showed differences in (1) the type of career self-management (i.e., career planning and career investment), (2) the approach to career self-management (i.e., proactive, adaptive, or passive), and the drivers of career self-management (i.e., intrinsic or extrinsic motivation). Although in the literature a distinction is made between proactive and adaptive (or: reactive), we also identified a passive activity. See Table F in Supplementary Material for additional quotes reflecting the four different career self-management patterns. Table 1 shows the demographics of the solo self-employed engaging in these four career self-management patterns. A visual representation of the demographics is presented in Fig. 1 in the Supplementary Material.

**Proactive crafters.** Among the proactive crafters, the majority was female (75.6%). They have diverse occupations, primarily consisting of HR consultants/professionals (31.7%), coaches and trainers (24.4%), and beauty workers (24.4%). The smallest shares represented construction workers and others (both 2.4%).

The proactive crafters' career self-management was characterized by their frequent engagement in career planning and career investment, reflecting a short and long-term time perspective. Their predominant proactivity, combined with intrinsic motivation to engage in career self-management, distinguished proactive crafters from other individuals in other career self-management patterns.

More specifically, most proactive crafters invested in career planning by exploring opportunities to craft their careers to create person-career fit. Proactive crafters expressed this as 'do what they want to do' and explained that their engagement in reflective cognitions helped them maintain their person-career fit. For example, proactive crafters sought out a coach who helped them reflect upon experiences and navigate the future for their own inherent interest. Furthermore, proactive crafters engaged in career investment and intentionally sought and chose assignments to ensure they liked what they did.

*'If you want work, that really suits you, that you are good at and that you like, then you have to choose that as well. Then you have to take a risk by saying no to some things that do not fit your profile.'*

(ID 66, coach/trainer, female, 31 years)

Moreover, a smaller number of proactive crafters radically switched work activities through job innovation when they lost the fun in their 'job.' Or, less radically, some regularly diversified or expanded their work activities to maintain their person-career fit.

*'I just lost the fun a bit. So I thought I have to do something to get the pleasure back while distinguishing myself a bit more from others who are already here in the village. [...] I started doing some courses, and as a result, I got more variety and I started to like my treatments again.'*

(ID 38, beautician, female, 35 years)

Furthermore, they often engaged in development opportunities, connected with others, and set goals for themselves to experience inner joy or attract their preferred work activities. Additionally, career planning and career investment enabled them to anticipate market demands and developments in their field of expertise and distinguish themselves from competitors. Although these latter reasons are mostly extrinsically driven, proactive crafters emphasized perseverance in holding on to their vision and mission in crafting their career and their desire to step out of their comfort zone to grow.

*'No, I am not going to do that [accepting a specific assignment] because I do not want to. I stand for certain values. [...] I do it my way, and I am confident that it will really work.'*

(ID 13, real estate stylist, female, 48 years)

Finally, some proactive crafters explicitly mentioned having made a deliberate, and intrinsically driven, choice to engage in hybrid solo self-employment (i.e., combining solo self-employment with a salaried position). They considered the parttime salaried position a (preventive) solution to deal with the social isolation characterizing solo self-employment, a way of achieving income security, an opportunity to enjoy different work activities, and/or a way of benefitting from development opportunities in employment.

*'I stay solo self-employed with a combination of small salaried employment. I like having colleagues. I just very much enjoy working in salaried employment. And I also like the variety in my work activities.'*

(ID 13, real estate stylist, female, 48 years)

**Adaptive crafters.** The adaptive crafters show an equal division in gender (50% male) and occupations; creative workers, coaches and trainers, HR consultants/professionals, and beauty workers represent an equal share (21.9%). In addition, we identified several construction workers (9.4%) and other occupations (3.1%) as part of this group.

Like the proactive crafters, the adaptive crafters frequently engaged in career planning and career investment using a short-term and long-term perspective to craft their careers as solo self-employed workers. However, what distinguished the adaptive crafters from

other career self-management patterns was their predominant extrinsic motivation to engage in career self-management combined with their more adaptive way of crafting their career.

More specifically, the adaptive crafters felt urged to invest in career planning to distinguish themselves from competitors and maintain their market attractiveness. In addition, they felt the necessity to choose one direction for their business or create a backup plan if they cannot continue their current work activities.

*'Throughout our market, they are mainly looking for young people who are cheaper, more malleable. I still have to work for 20 years, but how I am going to fill that up?! So that is why I started that new company to see if there is something in it.'*

(ID 75, copywriter & talent connector, male, 49 years)

In the same vein, most adaptive crafters decided upon work activities as they felt the urgent necessity to avoid future complications. They diversified their work activities to maintain their market attractiveness, reduce income insecurity, avoid seasonal work, and anticipate developments in their field of expertise and market demands. Similar reasons applied for their engagement in skills and knowledge development. Developing skills and knowledge is considered a necessary and instrumental strategy to deal with external pressures, such as preparing oneself for future complications, dealing with income insecurity, enabling themselves to deliver a good job, and maintaining their worth, allowing them to continue their work activities.

*'Studying is not something that suits me [...] If I do not know something, I will ask someone or pay someone who does. But I am not the person to find that out for myself. [...] But I think it is important because it makes me more employable, not because I want to learn. I just do that for the benefit of my business.'*

(ID 47, infra mechanic, male, 38 years)

Furthermore, the adaptive crafters felt they must engage in networking and self-promotion because they had to get work and prepare themselves for worse times.

*'I felt I had to network as well. I joined an entrepreneurial club and at a women's drink, and I just noticed that I really do not like that; you have to sit down and pretend you are having fun.'*

(ID 39, counselor, female, 51 years)

**Survivors.** Compared to the proactive crafters and adaptive crafters, the survivors show a more unified representation in terms of gender and occupation. All were male (100%) and predominantly construction workers (82.4%). A much smaller amount of survivors worked as a coach/trainer (11.8%) or as a creative worker (5.9%).

The survivors infrequently engaged in career self-management and only did so to a limited degree, and only to "survive" short-term tasks and barriers. They had a predominantly passive way of shaping their career, and when they did engage in career self-management, this was primarily adaptive and extrinsically motivated.

The survivors did not invest in career planning, such as career orientation or goal-setting, because they lacked a career direction and did not see other opportunities than continuing their current work activities. Considering their engagement in career investment, survivors periodically engaged in collaborating with others, which was the most common behavior among the survivors. The survivors explained that collaborating with others helped them survive by sharing work responsibilities, dealing with competitors, avoiding high investment costs, and handling their work overload and physical burden.

*'I also work a lot with other gardeners. We try to help each other instead of working against each other [...] Working together with others so that he does not have to make large investments himself [e.g., purchasing materials].'*

(ID 50, paver, male, 32 years)

In addition, some survivors explained their urgent need to change or expand their work activities to survive income insecurity, physical complaints, or avoid seasonal work. Furthermore, survivors rarely invested in developing skills or knowledge; they mainly learned by doing or occasionally learned from others. Regarding their lack of investment in developing skills and expertise, several survivors mentioned that a high workload prevented them from doing this even if they wanted to invest in skills and knowledge development. Additionally, survivors said that (new) law and regulation negatively influenced the knowledge value.

*'The tricky thing is that you actually have to keep developing on all levels. That is really a part I have neglected the last couple of years. [...] In recent years, I did not learn new techniques because I had no time for it.'*

(ID 12, personal coach/therapist, male, 44 years)

Another typical behavior of survivors was to continue working for their previous employer. Lastly, the survivors expressed their desire to invest in boundary management to attain work-life balance and recover from the physical burden of their work activities. However, due to the urge to benefit from too much work, they failed in boundary management.

*'I notice that it is running or standing still. There is no in-between. I would perhaps like to work a bit less, but that is just not possible at the moment. You are on that train, and you have to go along with it. If you do not do that, I do not think you can make it.'*

(ID 18, painter, male, 46 years)

**Passive balancers.** A little over half of the passive balancers were male (58.3%). They performed a rather diverse set of occupations: half of them worked in construction (50.0%), a quarter worked as a beauty worker (25.5%), and others worked as an HR consultant/professional (8.3%) or in other occupations (16.7%).

The *passive balancers*, like the survivors, also infrequently engaged in career self-management, though for them, it is an intrinsically motivated choice. In all, passive balancers adopted a short-term perspective, focusing on day-to-day activities rather than managing their long-term careers. In doing so, they hardly demonstrated career self-management and had a passive attitude toward career development.

Concerning career planning, passive balancers did not invest in goal-setting behavior; they aimed to continue their current work activities. Additionally, they explicitly mentioned that they did not have clear ambitions and did not want to become more successful. They enjoyed the status quo of their career. They stated that ‘one cannot predict the future’ and did not feel the urge to prepare for the future proactively.

*‘My goal with my business? I do not have that. You do not know what time will bring. [...] I live from day to day.’*

*(ID 26, tiler, male, 24 years)*

This *carpe diem* outlook on their career fitted their need to maintain their work-life balance.

*‘If your family life does not match your work, I do not think you will be very happy. I think it is especially a success if you can combine that and that it runs smoothly. [...] In principle, I could earn 20 euros or 30 more a day, but I think it is more important that I just had a nice working day.’*

*(ID 34, hairdresser, female, 39 years)*

In terms of career investment, passive balancers collaborated with others to have sufficient work activities and intentionally decided upon their work activities to avoid work overload. Moreover, they rarely invested in self-promotion, as they did not want to attain new clients and aimed to prevent work overload. In addition, they scarcely invested in developing skills and knowledge as there were limited developments in their field of expertise. They explained they mostly learned by doing their work activities or reading about their area of expertise.

*‘I have done some courses, but most of the time it is just doing it and searching on the internet in case you run into something.’*

*(ID 41, photographer, female, 58 years)*

#### 4.2. Enablers and barriers in the solo self-employment context

The contextual factors were classified as either *enablers* (see Table G in Supplementary Material) or *barriers* (see Table H in Supplementary Material). Within the classification of enablers and barriers, we identified subcategories representing factors related to (1) income (in)security, (2) the labor market, and (3) non-work.

More specifically, enablers related to income security included, for example, the ability to work all seasons, the ability to earn more money compared to working in an employed job, and having a partner with whom they shared their income. These enablers helped the solo self-employed orient themselves and their business toward person-career fit without worrying about their income.

*‘I live with my partner who has a steady job and income, from which the fixed costs can be paid.’*

*(ID 93, HR advisor, female, 31 years)*

Enablers related to the labor market referred to, among others, the absence of organizational politics, the lack of developments in the field of expertise, a shortage in the labor market, and a decreasing number of competitors. More specifically, the lack of developments in their field of expertise eased the pressure of continuously updating knowledge and skills, and the shortage on the labor market and decreasing numbers of competitors in their industry provided, for example the construction workers, with more than sufficient assignments resulting in income security.

*‘There is not that much competition, because there are just too few construction workers.’*

*(ID 15, Insulation and carpentry construction worker, male, 33 years)*

Furthermore, non-work enablers included work-private life (e.g., the freedom to decide on working schedule and location and technology that enabled to work more efficiently), the personal domain (e.g., self-efficacy), and the social domain (e.g., social capital). These non-work enablers were often interrelated as, for example, the support of the partner enabled the solo self-employed to manage work and family life and enhance their self-efficacy as an entrepreneur.

*‘One moment I am sitting on the couch crying and I say to my wife: I am going to apply for a permanent job now, but then she says: no, you have to give this a chance. You really have to keep fighting and go for it.’*

*(ID 75, Copywriter & Talent Connector, male, 49 years)*

Barriers related to income insecurity included seasonal work, high investment costs, and the anxiety to lose customers. These barriers put pressure on the solo self-employed and challenged them to be strategic on how they engaged in career planning and investment. For example, due to seasonal work, the solo self-employed had to think of alternative work activities to ensure continuous revenue. In the same vein, high investment costs required the solo self-employed to strategically collaborate with peers and/or competitors in order to use each other's tools and machinery to avoid expensive investments.

*‘The creative sector is an expensive sector in terms of equipment because it keeps renewing itself continuously. Basically, when you buy a camera, it is already old by the time you buy it.’*



(ID 67, Digital content producer, male, 21 years)

Barriers related to the labor market referred to, among others, uncertainty about the future due to aging or a disappearing niche, and difficulties with following developments in the field of expertise, for example, due to (continuously) changing policy and regulation with regard to required certificates and licenses in their work domain.

*'The rules in the construction sector are getting stricter and stricter. Sometimes there are just too many rules. It can drive me crazy.'*  
(ID 42, Slusher, male, 37 years)

Moreover, non-work barriers included barriers related to work-private life (e.g., young children, technology hindering work-life balance, and the pressure of being busy all day long), the personal domain (e.g., difficulties related to one's personality, lack of skills, and lack of human capital), and the social domain (e.g., diminishing social capital, social isolation and the lack of support from partner). Especially in the context of solo self-employment, the individual has to carry the full responsibility of managing a business on their own which requires human capital in different domains such as administration, legislation, and one's own expertise as well as personal resources such as self-efficacy and self-discipline.

*'I try to be home by dinner in the evening, but I don't always succeed. I'm in the setup of my business, you can't compare that with forty hours work week.'*  
(ID 15, Insulation and carpentry construction worker, male, 33 years)

#### 4.3. Sustainable careers in the context of solo self-employment

To advance our understanding of sustainable careers in the context of solo self-employment, we explored the interplay between career self-management patterns, contextual factors (i.e., enablers and barriers), and career sustainability.

*Proactive crafters.* First, regarding the sustainability of proactive crafters' careers, most were happy with their current situation. Their happiness resulted from enablers related to the labor market, such as the freedom related to being solo self-employed and being able to choose assignments fitting their values, and related to policy in terms of the absence of organizational politics:

*'I really wanted to have my own business for a long time because I like being entrepreneurial and the freedom. With freedom, I mean the high level of self-determination in terms of choosing which jobs I take on, no accountability, I no longer have to deal with politics within the organization.'*

(ID 100, HR advisor, female, 36 years)

Their happiness was experienced through feelings of inner joy when performing their work activities, being proud of their accomplishments, and being successful. As a result, many proactive crafters wanted to continue what they were currently doing.

*'How beautiful is it when you can make someone happy. That is actually why I thought this is something nice. You make people happy. And then it is, it is just fun to do.'*

(ID 4, permanent make-up artist, female, 31 years)

With regard to productivity, all proactive crafters mentioned that they were very productive as their revenue was growing and they had (more than) sufficient work. A small number of the proactive crafters expressed their desire to attain even more clients. In contrast, a relatively similar number of proactive crafters explicitly mentioned that they want to reduce their productivity or be careful of being too busy and losing their balance. The latter referred to a typical overarching barrier of solo self-employment, as proactive crafters felt responsible for dealing with all aspects of the business.

In contrast to findings on the proactive crafters' happiness and productivity, we found mixed results regarding their health. Half of the proactive crafters did not complain about health issues. Some of these proactive crafters explained that they did not face health issues (anymore) because they intentionally invested in their health or that being solo self-employed enhanced their health compared to when they had an employed job. However, the other half of the proactive crafters experienced health issues, referring to either mental or physical health issues or a combination. The physical complaints mainly resulted from barriers in work-private life, such as long and intensive working days and unhealthy work circumstances.

*'Sometimes, I crash and just think by myself, 'I really cannot make it any more' and spend the whole weekend in my bed because I am so tired. From that perspective, it also helps as a freelancer every time you have a new job, you can get in there with new energy.'*

(ID 79, creative producer digital, female, 48 years)

As they experienced physical health issues, they also worried about their future employability, which resulted in mental stress for some proactive crafters. Due to the physical or mental health issues, some of these proactive crafters mentioned that they already knew that they could not continue their current work activities. One proactive crafter said that he had chosen to change work activities due to physical complaints to decrease the physical burden; however, he disliked the current work activities, which diminished his happiness.

Overall, these findings show that proactive career crafters seem to be in a favorable position related to their career sustainability. Their proactive, intrinsically motivated career self-management strategies result in high levels of happiness and productivity. However, there is a potential trade-off with health. Several proactive career crafters indicated they currently or in the past suffered from health-related issues. The findings also emphasize how individual career self-management interacts with enablers and barriers: proactive career crafters seem exceptionally proficient at identifying and using the enablers in their context, yet, paradoxically, their

proactive career behaviors also make them prone to experiencing barriers, such as high workload and many responsibilities.

*Adaptive crafters.* Similar to the proactive crafters, adaptive crafters seemed to be happy with their current situation. Their happiness resulted from enablers related to the labor market, such as their freedom of being solo self-employed, the diversity in work activities, and the opportunity to satisfy clients, as well as enablers related to income security such as earning one's own money. In addition, they experienced happiness through the inner joy of performing their work activities and being proud of what they have accomplished:

*'Nothing is better than making music and helping people make music. That's still my drive.'*

(ID 73, conductor, male, 38 years)

The majority of the adaptive crafters aimed to continue current work activities or personal development to become even more successful. However, a minority of the adaptive crafters mentioned that they did not enjoy their everyday work activities and were less happy.

The findings on the adaptive crafters' productivity were quite diverse. A slight majority of this group reported that their revenue was growing and that they had sufficient work. Yet, other adaptive crafters emphasized their aim of obtaining more clients as they, for example, experienced disadvantages of seasonal work, experienced a diminishing amount of work, or were still looking for a way to sell their services or products.

*'I really do not think I have had enough success. I am not satisfied at all, but I would not know how to do it better.'*

(ID 62, coach, female, 62 years)

Regarding the adaptive crafters' health, half of the adaptive crafters did not experience health issues, while the other half experienced mental or physical health issues or a combination thereof. The physical complaints mainly resulted from barriers in the domain of work-private life, such as long and intensive working days, and related to the labor market (i.e., unhealthy work circumstances). As they experienced physical health issues, they also worried about their future employability, which resulted in mental stress. Due to the physical or mental health issues, some of these adaptive crafters mentioned that they already know that they cannot continue their current work activities.

*'I do get physical problems more often. I have been lying on the couch like a zombie regularly in the past year. That is what worries me sometimes. I still have 40 years to go, and then I wonder how I am going to manage.'*

(ID 49, carpenter, male, 32 years)

Taken together, adaptive crafters show a mixed picture in terms of their career sustainability. Although the majority is quite happy with their career, a significant part of this group also had concerns about long-term productivity and reported mental and physical health issues. Compared to the proactive crafters, the adaptive crafters may be equally able to cope with and adapt to challenges in their circumstances. Yet, they seem less able to capitalize on enablers, explaining the more mixed picture regarding their career sustainability.

*Survivors.* Similar to the previous career self-management patterns, the survivors expressed their happiness as a result of enablers related to the labor market, such as the freedom of being solo self-employed, satisfying clients and the diversity of work activities, and related to the personal domain the inner joy of performing the work activities. Some explicitly expressed their individual need to continue their current work activities and become even more successful, while others explicitly expressed pride in their accomplishments.

The findings on the survivors' productivity were highly diverse. Like the adaptive crafters, roughly half of the survivors reported having a sufficient amount of work, whereas the other half worried about having too much work. Yet, contrary to the adaptive crafters, a small group of survivors struggled to deal with the overarching barriers, such as carrying the full responsibility of solo self-employment, and barriers related to income insecurity, such as managing productivity losses due to seasonal work.

*'If the weather is bad, we just cannot do anything. It only has to freeze, and everything freezes right away. I find that very annoying, actually. I have also thought about doing something else. But I do not want to give up either. I cannot say that I will close the company from October to March because the contractor's work will continue. If I have to join, I have to come anyway. [...] You have to make sure that you build up a buffer in the summer so that you can survive the winter a bit. You can always insure yourself against it, but it is expensive. It really is very expensive.'*

(ID 42, Slusher, male, 37 years)

Concerning their health, almost all survivors had physical complaints, some of them combined with mental stress. These health issues resulted from barriers related to the labor market, such as unhealthy work circumstances and worry about the future. They are also associated with work-private life, such as long and intensive working days, lack of self-care opportunities, and barriers in the personal domain, such as illnesses. The majority of the survivors worked in the construction industry, which is characterized by high market demands that hindered their aim of reducing working hours.

*'When it's finished, I just go home at 2 pm. But now it's very busy, and I'll just go to work tomorrow morning while everyone else is enjoying Kings Day.'*

(ID 46, tiler, male, 58 years)

Therefore, survivors faced difficulties in seeking a balance between attaining sufficient work while avoiding work overload, which was

at the expense of their health. As a result, the survivors worried about the future as they expected their physical health to worsen due to aging.

In sum, the survivors seem to be at risk in terms of their career sustainability. Though they all expressed joy in performing their work, a significant part of this group experienced worries or struggles regarding their productivity. In addition, almost all of them experienced health-related issues. This group predominantly reported barriers that they need to deal with and much fewer enablers to help them thrive. Combined with their passive and externally oriented career self-management strategies, this results in a high-risk scenario for the sustainability of their careers.

*Passive balancers.* Finally, the passive balancers expressed their happiness in terms of the inner joy of performing their work activities, being proud of their accomplishments, and feeling successful. Enablers related to the labor market, such as the diversity in work activities and satisfying their clients, enhanced their happiness.

*'Work is also a little relaxation. Just nice work to do and that I see that customers are satisfied again because I made something beautiful for them.'*

(ID 27, tiler, male, 25 years)

Unique to this group was the emphasis on enjoying leisure time and non-work activities as a source of happiness in their solo self-employed career. The passive balancers aimed to continue their current work activities and did not aim for more success.

With regard to their productivity, the passive balancers mentioned they had a continuous workflow, resulting in a sufficient amount of work. They emphasized that just having enough work is good enough as they mainly aim for relaxed working days. The passive balancers did not want too much work, and therefore they did not invest in attaining new clients even though some of them experienced a diminishing number of clients. Some of them explicitly mentioned that they did not want to become more successful:

*'The hourly wage is low, but the fun in the work is more important to me. I have the best job in the world, even though I really do not earn a lot of money.'*

(ID 40, dog groomer, female, 56 years)

Finally, the passive balancers did not experience any mental health issues as they prevented an overload of work or worry about the future. Some passive balancers experienced barriers related to the labor market, such as unhealthy work circumstances, which they indicated might hinder their career sustainability. For some passive balancers, these harmful circumstances resulted in physical complaints, which was then a reason to avoid work overload.

The passive balancers show a somewhat paradoxical picture in terms of career sustainability. Although they have a passive orientation toward career self-management, they seemingly do so from intrinsic motivation. For this group, their business is not all that counts toward their career, as they also value non-work activities, and they strive for a good balance between work and non-work. This group mainly used enablers and deals with barriers to maintain their overall balance, rather than focusing on enhancing business and career success.

## 5. Discussion

This study aimed to identify career self-management patterns among the solo self-employed in light of their career sustainability and examine the interplay with enablers and barriers in the unique context of solo self-employment. Based on 102 interviews among a heterogeneous sample of solo self-employed workers, we identified four career self-management patterns: *proactive crafters*, *adaptive crafters*, *survivors*, and *passive balancers*. Furthermore, we found that the career sustainability across these patterns of career self-management differs due to contextual enablers and barriers. These findings have several implications.

First, concerning types of career self-management, De Vos et al. (2020) and Frese and Fay (2001) explained that individuals might either proactively or reactively adapt to situations through engagement in career self-management. This distinction between proactivity and reactivity particularly showed between proactive crafters and adaptive crafters. To illustrate, the proactive crafters proactively engaged in career planning and career investment, driven predominantly by intrinsic motivation (Deci & Ryan, 1985; Kossek et al., 1998) and person-career fit (De Vos et al., 2020; Parasuraman et al., 2000). In contrast, the adaptive crafters reactively engaged in career planning and career investment driven primarily by extrinsic motivation (Deci & Ryan, 1985; Kossek et al., 1998) and business success. In addition, we identified the survivors and passive balancers who both had a predominantly passive approach, engaging in career self-management to a limited degree. Like the description of 'passive career development' by Engel et al. (2017), the survivors and passive balancers did not engage in career planning or career investment due to a lack of time or perceived importance. In all, our findings suggest that solo self-employed workers' career self-management can be categorized into three general approaches: proactive, reactive (or: adaptive), and passive. The approach shown by the solo self-employed seemed to relate to one's gender and business tenure, which provides fruitful insights for further exploring career sustainability among the solo self-employed. Specifically, the person-career fit seeking proactive crafters are predominantly female, whereas the business-success seeking passive survivors are all male. This gender difference corresponds with previous studies showing that female entrepreneurs tend to invest in business knowledge growth (McDonald et al., 2005). Moreover, compared to the proactive crafters and adaptive crafters, the business tenure of the passive balancers was highest (14.1 years), followed by the survivors (10.2 years). Based on previous studies on business life cycles and career development models (Hanks, 1990; Super & Hall, 1978), solo self-employed workers with more mature businesses might feel urged to protect what they already gained instead of targeting new territory in the external market through career self-management.

Second, we explored contextual factors: enablers and barriers of solo self-employment that may affect their career sustainability (cf. De Vos et al., 2020). Enablers seem to directly affect career sustainability, particularly happiness, which corresponds with Richardson and McKenna's (2020) finding that resources could enhance career sustainability. Moreover, enablers seemed to interact with career self-management. More specifically, the performed occupation seemed to include enabling factors clarifying differences among career self-management. Compared to the other career self-management patterns, proactive crafters had the highest number of HR professionals and coaches/trainers and the lowest number of construction workers. Vice versa, the survivors and passive balancers included the lowest numbers of HR professionals and the highest number of construction workers. As most of the proactive crafters worked as HR professionals and showed frequent engagement in career planning and career behavior, their career self-management might be attributed to their foresightedness on the importance of career self-management from an HR perspective (Arthur & Rousseau, 1996; Ulrich et al., 2017).

Whereas enablers mostly connected with participants' happiness, barriers primarily seemed to affect career sustainability in terms of health. The survivors, who primarily work in construction, discussed barriers that directly decreased their physical health, such as physically heavy work activities, lack of opportunities to delegate work, and lack of opportunities to reduce work pace. The heavy work activities performed by the survivors combined with a lack of future perspective due to a shortage in the labor market seemed to be the roots of their health issues (Biswas et al., 2017; Sánchez et al., 2017). Similar findings apply to proactive crafters and adaptive crafters. They also reported health-related problems that were sometimes difficult to cope with due to prolonged and intensive working days and unhealthy work circumstances. Hence, barriers seemed to directly influence career sustainability, which supports the findings of Richardson and McKenna (2020), who indicated that (physical) demands could negatively affect career sustainability. Additionally, worries about income insecurity and expensive insurances, as mentioned by Murgia and Pulignano (2019) and Alacovska et al. (2020), directly decreased their mental health. The only exception was the passive balancers, who prioritized a balance regarding their well-being and non-work situation, which allowed them to manage the barriers more effectively. Hence, this study contributes to identifying differences in contextual factors for different groups of solo self-employed that uniquely affect career sustainability in terms of potentially diminishing one's mental and/or physical health (Upadaya et al., 2016).

Zooming into the findings on the barriers, we identified a double-edged effect. On the one hand, barriers on occupational level, such as income insecurity and the necessity to keep up with developments in the area of expertise (Freese & Van den Groenendaal, 2020), seemed to trigger engagement in career planning and career investment, which was, for example, applicable to the adaptive crafters. On the other hand, barriers on the macro level seemed to hinder engagement in career self-management. For instance, obstacles related to policy, such as changing laws and regulations, prevented the survivors from engaging in skill and knowledge development because this new law or regulation potentially decreases the value of their knowledge in the future. These differences may be explained by the career self-management approach and the underlying motivational process: adaptive crafters are extrinsically motivated to effectively adapt to their circumstances, whereas survivors remain passive even in the face of significant external barriers. However, it should be noted that some overarching barriers prevented all solo self-employed from investing in career self-management, such as carrying the full responsibility of their business as well as their career. Hence, barriers can promote and hamper the career sustainability of the solo self-employed, depending on the underlying motivations of their career self-management.

Third, despite the health issues experienced by proactive crafters, adaptive crafters, and the survivors all expressed their happiness with their current situation. This finding opens the discussion on the balance between the different components of sustainable careers (i.e., happy, healthy, and productive) (De Vos et al., 2020). As most of the studied solo self-employed experienced both mental and physical health issues but still want to continue their career in solo self-employment, solo self-employed workers' happiness seemed the engine for career sustainability (e.g., Hessels et al., 2018). However, the health issues should not be downplayed. Based on our findings, health issues were present among the solo self-employed, engaging in all career self-management patterns (except the passive balancers) with physical and non-physical jobs. These common health issues are likely to be caused by the limited career alternatives and support systems. This finding may point toward a potential Matthew effect regarding their employability (Forrier et al., 2018), which refers to "the strong getting stronger and the weak getting weaker." In this case, the solo self-employed who experience many barriers and have limited capacity to cope with them end up in a negative cycle resulting from a lack of resources. Due to this lack of resources, it becomes even more challenging to attain other resources. As a result, the contextual barriers will potentially enlarge the precariousness of these solo self-employed (Murgia & Pulignano, 2019). Based on our findings, it seems that mainly the survivors are at risk for such a resource loss spiral.

Finally, a somewhat paradoxical picture emerged concerning the engagement in the passive balancers' career self-management and career sustainability. These solo self-employed demonstrated a passive approach to career self-management, not looking ahead but only being concerned about day-to-day activities. For them, however, this passive approach was a deliberate choice as they prioritized a balance in their life and career, for example, also putting great value on non-work areas, such as their family life and leisure activities. In contrast to the other groups, the passive balancers rarely engaged in career self-management even though some faced income insecurity and did not have a backup plan. Interestingly, despite their experienced barriers and passive approach to career self-management, the passive balancers reported being overall quite happy, healthy, and productive, indicating high levels of career sustainability. This finding seems to temper the dominant assumption in the contemporary literature that a proactive approach to career development is always crucial, which is in line with idiosyncratic thinking of research on sustainable careers (cf. Akkermans & Kubasch, 2017; Baruch & Vardi, 2016; De Vos et al., 2020). As these passive balancers shape their career based on personal values (e.g., relaxed working days and work-life balance), this might indicate a person-career fit clarifying their happiness, health, and productivity. The passive balancers showed that person-career fit could be accomplished without proactive engagement in career self-management. Hence, a proactive approach might be less critical in achieving a person-career fit.

### 5.1. Limitations and suggestions for future research

Although we included a large and heterogeneous sample of 102 solo self-employed workers, several limitations have to be considered when interpreting the results. First, with regard to our sample, we only included Dutch solo self-employed. It remains unclear to what extent our findings could be generalized to other EU Member States characterized by a growing share of solo self-employment in the labor markets (CBS, 2019). In addition, with regard to our finding that some respondents in our sample engaged in hybrid solo self-employment for different reasons, we would like to spark scholars' interest to further explore the concept of hybrid solo self-employment from a sustainable career perspective. Although the respondents mentioned to experience resources from their hybrid solo self-employment (i.e., social contact, income security, work variety, and development opportunities), this job multiplicity could also give rise to challenges due to demands from the employed work setting as well as the entrepreneurial business context and depleted personal resources such as time and energy (Thorgren et al., 2014).

Second, the cross-sectional design of our study limited the identification of changes in career self-management patterns over time, as described by De Vos et al. (2020). To illustrate, the specific situation of the proactive crafter who had chosen to change work activities to decrease the physical burden at the cost of his happiness showed the need for more longitudinal empirical research on intra-individual changes over time (De Vos et al., 2020; Nagy et al., 2019). Such longitudinal empirical research would also offer opportunities to connect the long-standing research on entrepreneurial intentions and starting motivations with the emerging literature on their longer-term career development. Hence, future research could study how solo self-employed workers with different start-up motivations may vary in their career self-management strategies over time. More specifically, for future research we see a fruitful research avenue in studying how solo self-employed workers with different start-up motivation might differ in their frequency as well as the way in which they engage in career planning and career investment behavior across career stages. For example, a solo self-employed who feels pushed into solo self-employed might remain more attracted to hybrid solo self-employment compared to a solo self-employed who feels pulled to solo self-employed for the opportunity to experience more challenge and freedom (Dawson & Henley, 2012).

Third, our findings indicated that the solo self-employed for whom barriers hinder engagement in career self-management might experience decreased career sustainability over time due to a negative spiral of resource loss (De Vos et al., 2020). Based on this potential Matthew effect, for example, among the survivors, we emphasize the need for more research on future career sustainability of the solo self-employed with different career self-management patterns. Building on the conservation of resources theory (Hobfoll, 1989), we recommend testing resource gain and loss cycles in quantitative growth models among large samples of solo self-employed workers. By doing so, we also recommend to also investigate objective number, such as profit or the number of customers, to measure the objective level of productivity instead of subjective measures of happiness, health, and productivity (Wach et al., 2016).

Finally, the solo self-employed across all career self-management patterns mentioned the importance of intentionally selecting work activities to maintain their happiness, health, or productivity. Here, we see an essential role for organizations in optimizing the employment relationships with solo self-employed workers. As the solo self-employed discussed the importance of assignments, organizations may play a significant role in designing projects to provide the solo self-employed with opportunities to enhance their career sustainability in terms of supporting their career self-management, promoting enablers, and tackling barriers. More specifically, it would be relevant to examine the psychological contracts within the employment relationships between organizations and the solo self-employed and investigate how the fulfillment of psychological contracts relates to sustainable careers of the solo self-employed (De Vos et al., 2020).

### 5.2. Practical implications

The findings showed that there are different career self-management strategies with different implications for career sustainability. Although there is no "universal sustainable career" (Van der Heijden et al., 2020), one of the remarkable findings is that the passive balancers experience career sustainability despite not being permanently in a proactive career planning and career investing mode. As a result, a practical implication of this finding for the solo self-employed is that career sustainability in their work context is not only about intensively building an entrepreneurial career and trying to get a grip on the dynamics and insecurities of solo self-employment, but also about intrinsically finding a good balance (i.e., person-career fit). Accordingly, the findings might help the solo self-employed to reflect upon their current career self-management strategies and learn from the passive balancer approach to create a balance while striving toward achieving career sustainability.

Furthermore, as we showed that the interplay between career self-management patterns and contextual factors resulted in different career sustainability, our findings inform both solo self-employed workers and policy makers in how to intervene in solo self-employed career development to promote career sustainability. For example, the survivors dealt differently with their barriers than the proactive crafters indicating that different career interventions are required. Therefore, to promote sustainable careers, we recommend policymakers to support solo self-employed workers in applying a holistic approach toward the inclusion of all sustainable career dimensions (i.e., happy, healthy, and productive). In addition, they should consider contextual factors that might hinder (i.e., barriers) or promote (i.e., enablers) sustainable careers in solo self-employment.

Finally, we also see a significant role for organizations contributing to solo self-employed workers' career sustainability. We invite organizations working with solo self-employed workers to pay attention to the solo self-employed workers' career self-management patterns and barriers. By negotiating how organizations could support solo self-employed workers in attaining sustainable careers, the employment relationships between organizations and solo self-employed workers will become more relational, resulting in beneficial outcomes for organizations (e.g., Aselage & Eisenberger, 2003). Simultaneously, the sustainability of solo self-employed

workers will increase, resulting in a more sustainable labor market.

## 6. Conclusion

The findings contribute to the literature on sustainable careers in two ways. First, the results showed an interaction between personal (i.e., career self-management strategies), contextual (i.e., enablers and barriers), and temporal (i.e., changes over time) elements. The four career self-management patterns interact with contextual factors and impact career sustainability in unique ways. Second, the findings showed the interplay of the three sustainable career dimensions (i.e., happy, healthy, and productive). Overall, the solo self-employed workers' happiness is fine while the level of productivity is mixed, and their health seems to be most problematic.

## CRediT authorship contribution statement

Conceptualization	Dr. Sjanne Marie E. van den Groenendaal Dr. Chen Fleisher
Methodology	Dr. Sjanne Marie E. van den Groenendaal Dr. Chen Fleisher Prof. dr. Dorien T.A.M. Kooij Prof. dr. Rob F. Poell Prof. dr. Charissa Freese
Software	Dr. Sjanne Marie E. van den Groenendaal Dr. Jos Akkermans Prof. dr. Dorien T.A.M. Kooij Prof. dr. Rob F. Poell Prof. dr. Charissa Freese
Validation	Dr. Sjanne Marie E. van den Groenendaal Dr. Jos Akkermans Prof. dr. Dorien T.A.M. Kooij Prof. dr. Rob F. Poell Prof. dr. Charissa Freese
Formal analysis	Dr. Sjanne Marie E. van den Groenendaal Dr. Jos Akkermans Prof. dr. Dorien T.A.M. Kooij Prof. dr. Rob F. Poell Prof. dr. Charissa Freese
Investigation	Dr. Sjanne Marie E. van den Groenendaal Dr. Chen Fleisher Research assistants
Resources	Dr. Sjanne Marie E. van den Groenendaal Research assistants
Data curation	Dr. Sjanne Marie E. van den Groenendaal
Writing – Original Draft	Dr. Sjanne Marie E. van den Groenendaal Dr. Jos Akkermans
Writing – Review & Editing	Dr. Sjanne Marie E. van den Groenendaal Dr. Jos Akkermans Prof. dr. Dorien T.A.M. Kooij Prof. dr. Rob F. Poell Prof. dr. Charissa Freese
Visualization	Dr. Sjanne Marie E. van den Groenendaal
Supervision	Dr. Sjanne Marie E. van den Groenendaal
Project administration	Dr. Sjanne Marie E. van den Groenendaal
Funding acquisition	n.a.

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jvb.2022.103692>.

## References

- Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R. W. (2013). Competencies for the contemporary career: Development and preliminary validation of the Career Competencies Questionnaire. *Journal of Career Development, 40*(3), 245–267. <https://doi.org/10.1177/0894845312467501>
- Akkermans, J., & Kubasch, S. (2017). #Trending topics in careers: A review and future research agenda. *Career Development International, 22*(6), 586–627. <https://doi.org/10.1108/CDI-08-2017-0143>
- Alacovska, A., Fieseler, C., & Wong, S. I. (2020). “Thriving instead of surviving”: A capability approach to geographical career transitions in the creative industries. *Human Relations, 1*–30. <https://doi.org/10.1177/0018726720956689>
- Arthur, M. B., & Rousseau, D. M. (1996). A career lexicon for the 21st century. *Academy of Management Perspectives, 10*(4), 28–39. <https://doi.org/10.5465/ame.1996.3145317>
- Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior, 24*(5), 491–509. <https://doi.org/10.1002/job.211>
- Baldrige, D. C., & Kulkarni, M. (2017). The shaping of sustainable careers post hearing loss: Toward greater understanding of adult onset disability, disability identity, and career transitions. *Human Relations, 70*(10), 1217–1236. <https://doi.org/10.1177/0018726716687388>
- Baruch, Y., & Vardi, Y. (2016). A fresh look at the dark side of contemporary careers: Toward a realistic discourse. *British Journal of Management, 27*(2), 355–372. <https://doi.org/10.1111/1467-8551.12107>
- Benaquisto, L., & Given, L. (2008). *The SAGE encyclopedia of qualitative research methods*. New York: Sage.
- Benz, M., & Frey, B. S. (2004). Being independent raises happiness at work. *Swedish Economic Policy Review, 11*(2), 95–134.
- Biswas, G., Bhattacharya, A., & Bhattacharya, R. (2017). Occupational health status of construction workers: A review. *International Journal of Medical Science and Public Health, 6*(4), 669–675.
- Boeije, H. (2016). *Analyseren in Kwalitatief Onderzoek [analyzing in qualitative research]*. Amsterdam: Boom.
- Burke, A. E., FitzRoy, F. R., & Nolan, M. A. (2008). What makes a die-hard entrepreneur? Beyond the “employee or entrepreneur” dichotomy. *Small Business Economics, 31*(2), 93–115. <https://doi.org/10.1007/s11187-007-9086-6>
- Burton, M. D., Sørensen, J. B., & Dobrev, S. D. (2016). A careers perspective on entrepreneurship. *Entrepreneurship: Theory and Practice, 40*(2), 237–247. <https://doi.org/10.1111/etap.12230>
- Butler, N., & Russel, S. (2018). No funny business: Precarious work and emotional labor in stand-up comedy. *Human Relations, 71*(12), 1666–1686. <https://doi.org/10.1177/0018726718758880>
- Caliendo, M., Fossen, F., & Kritikos, A. S. (2014). Personality characteristics and the decisions to become and stay self-employed. *Small Business Economics, 42*(4), 787–814. <https://doi.org/10.1007/s11187-013-9514-8>
- Centraal Bureau voor de Statistiek [CBS]. (2019). *Flexwerk in Nederland en de EU. [Flexwork in the Netherlands and the EU]*.
- Centraal Bureau voor de Statistiek [CBS]. (2020). *Meer Zelfstandigen in Zakelijke Dienstverlening en Zorg. [More self-employed in business services and health care]*.
- Central Bureau of Statistics [CBS]. (2018). *Is elders in de EU het Aandeel ZZP'ers zo Hoog als in Nederland? [Is the proportion of solo self-employed persons elsewhere in the EU as high as in the Netherlands?]*
- Constantinou, C. S., Georgiou, M., & Perdikiogianni, M. (2017). A comparative method for themes saturation (CoMeTS) in qualitative interviews. *Qualitative Research, 17*(5), 571–588. <https://doi.org/10.1177/1468794116686650>
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology, 13*(1), 3–21.
- Dawson, C., & Henley, A. (2012). “Push” versus “pull” entrepreneurship: an ambiguous distinction? *International Journal of Entrepreneurial Behavior & Research, 18*(6), 697–719. <https://doi.org/10.1108/13552551211268139>
- De Vos, A., Akkermans, J., & Van Der Heijden, B. I. J. M. (2019). From occupational choice to career crafting. In H. Gunz, M. Lazarova, & W. Mayrhofer (Eds.), *The Routledge companion to career studies* (pp. 128–142). Routledge.
- De Vos, A., & Soens, N. (2008). Protean attitude and career success: The mediating role of self-management. *Journal of Vocational Behavior, 73*(3), 449–456. <https://doi.org/10.1016/j.jvb.2008.08.007>
- De Vos, A., & Van der Heijden, B. I. J. M. (Eds.). (2015). *Handbook of research on sustainable careers*. Cheltenham: Edward Elgar Publishing.
- De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior, 117*, 1–13. <https://doi.org/10.1016/j.jvb.2018.06.011>
- Deci, E. L., & Ryan, R. M. (1985). The general causality orientations scale: Self-determination in personality. *Journal of Research in Personality, 19*(2), 109–134. [https://doi.org/10.1016/0092-6566\(85\)90023-6](https://doi.org/10.1016/0092-6566(85)90023-6)
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne, 49*(3), 182–185. <https://doi.org/10.1037/a0012801>
- Edwards, V. M., & Steins, N. A. (1999). A framework for analysing contextual factors in common pool resource research. *Journal of Environmental Policy and Planning, 1*(3), 205–221. [https://doi.org/10.1002/\(SICI\)1522-7200\(199911\)1:3<205::AID-JEPP24>3.0.CO;2-X](https://doi.org/10.1002/(SICI)1522-7200(199911)1:3<205::AID-JEPP24>3.0.CO;2-X)
- Engel, Y., Van Burg, J. C., Kleijn, E., & Khapova, S. N. (2017). Past career in future thinking: How career management practices shape entrepreneurial decision-making. *Strategic Entrepreneurship Journal, 11*(2), 122–144. <https://doi.org/10.1002/sej.1243>
- Forrier, A., De Cuyper, N., & Akkermans, J. (2018). The winner takes it all, the loser has to fall: Provoking the agency perspective in employability research. *Human Resource Management Journal, 28*(4), 511–523. <https://doi.org/10.1111/1748-8583.12206>
- Freese, C., & Van den Groenendaal, S. M. E. (2020). Het ervaren en reduceren van onzekerheid door zzp'ers. [experiencing and reducing the insecurity by the solo self-employed]. In *Dynamiek op de Nederlandse Arbeidsmarkt: De Focus op Zekerheid [dynamics in the Dutch labour market: The focus on security]* (pp. 147–174). The Netherlands: CBS/TNO.
- Frese, M. (2009). *Toward a Psychology of Entrepreneurship: An Action Theory Perspective*. Now Publishers Inc.
- Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21<sup>st</sup> century. *Research in Organizational Behavior, 23*, 133–187. [https://doi.org/10.1016/S0191-3085\(01\)23005-6](https://doi.org/10.1016/S0191-3085(01)23005-6)
- Goodman, L. A. (1961). Snowball sampling. *The Annals of Mathematical Statistics, 32*(1), 148–170. <https://www.jstor.org/stable/2237615>.
- Greco, S., Masciari, E., & Pontieri, L. (2001). Combining inductive and deductive tools for data analysis. *AI Communications, 14*(2), 69–82.
- Hanks, S. (1990). *An empirical examination of the organizational life cycle in high technology firms*. Unpublished doctoral dissertation. University of Utah.
- Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: A comparison of Glaser and Strauss. *International Journal of Nursing Studies, 41*(2), 141–150. [https://doi.org/10.1016/S0020-7489\(03\)00113-5](https://doi.org/10.1016/S0020-7489(03)00113-5)
- Hessels, J., Arampatzi, E., van der Zwan, P., & Burger, M. (2018). Life satisfaction and self employment in different types of occupations. *Applied Economics Letters, 25*(11), 734–740. <https://doi.org/10.1080/13504851.2017.1361003>
- Hirschi, A., & Koen, J. (2021). Contemporary career orientations and career self-management: A review and integration. *Journal of Vocational Behavior, 126*, Article 103505.
- Hobfoll, S. E. (1989). Conservation of resources. A new attempt at conceptualizing stress. *The American Psychologist, 44*(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Jacobs, S., De Vos, A., Stuer, D., & Van der Heijden, B. I. J. M. (2019). “Knowing Me, Knowing You”. The importance of networking for freelancers’ careers: Examining the mediating role of need for relatedness fulfillment and employability. *Frontiers in Psychology, 10*, 1–14. <https://doi.org/10.3389/fpsyg.2019.02055>
- Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing, 72*(12), 2954–2965. <https://doi.org/10.1111/jan.13031>
- King, Z. (2004). Career self-management: Its nature, causes and consequences. *Journal of Vocational Behavior, 65*(1), 112–133. [https://doi.org/10.1016/S0001-8791\(03\)00052-6](https://doi.org/10.1016/S0001-8791(03)00052-6)
- Kooij, T. A. M. (2015). Successful aging at work: The active role of employees. *Work, Aging and Retirement, 1*(4), 309–319. <https://doi.org/10.1093/workar/wav018>

- Kossek, E. E., & Ollier-Malaterre, A. (2020). Desperately seeking sustainable careers: Redesigning professional jobs for the collaborative crafting of reduced-load work. *Journal of Vocational Behavior*, 117, 1–15. <https://doi.org/10.1016/j.jvb.2019.06.003>
- Kossek, E. E., Roberts, K., Fisher, S., & Demarr, B. (1998). Career self-management: A quasi-experimental assessment of the effects of a training intervention. *Personnel Psychology*, 51(4), 935–960. <https://doi.org/10.1111/j.1744-6570.1998.tb00746.x>
- Kozica, A., Bonss, U., & Kaiser, S. (2014). Freelancers and the absorption of external knowledge: Practical implications and theoretical contributions. *Knowledge Management Research and Practice*, 12(4), 421–431. <https://doi.org/10.1057/kmrp.2013.2>
- Lazear, E. P. (2004). Balanced skills and entrepreneurship. *The American Economic Review*, 94(2), 208–211. <https://www.jstor.org/stable/3592884>
- Lo Presti, A., Pluviano, S., & Briscoe, J. P. (2018). Are freelancers a breed apart? The role of protean and boundaryless career attitudes in employability and career success. *Human Resource Management Journal*, 28(3), 427–442. <https://doi.org/10.1111/1748-8583.12188>
- Mallin, M. L., Ragland, C. B., & Finkle, T. A. (2014). The proactive behavior of younger salespeople: antecedents and outcomes. *Journal of Marketing Channels*, 21(4), 268–278. <https://doi.org/10.1080/1046669X.2014.945359>
- McDonald, P., Brown, K., & Bradley, L. (2005). Have traditional career paths given way to protean ones? *Career Development International*, 10(2), 109–129.
- Murgia, A., & Pulignano, V. (2019). Neither precarious nor entrepreneur: The subjective experience of hybrid self-employed workers. *Economic and Industrial Democracy*, 1–27. <https://doi.org/10.1177/0143831X19873966>
- Nagy, N., Froidevaux, A., & Hirschi, A. (2019). Lifespan perspectives on careers and career development. In B. B. Baltes, C. W. Rudolph, & H. Zacher (Eds.), *Work across the lifespan (vol. 1)*. Elsevier.
- OECD. (2016). *Self-employed without employees (indicator)*. <https://doi.org/10.1787/5d5d0d63-en>
- OECD. (2017). *OECD/European Union (2017), the missing entrepreneurs 2017: Policies for inclusive entrepreneurship*. OECD Publishing. <https://doi.org/10.1787/9789264283602-en>
- Parasuraman, S., Greenhaus, J. H., & Linnehan, F. (2000). Time, person-career fit, and the boundaryless career. *Trends in Organizational Behavior*, 7, 63–78.
- Quigley, N. R., & Tymon, W. G. (2006). Toward an integrated model of intrinsic motivation and career self-management. *Career Development International*, 11(6), 522–543. <https://doi.org/10.1108/13620430610692935>
- Richardson, J., & McKenna, S. (2020). An exploration of career sustainability in and after professional sport. *Journal of Vocational Behavior*, 117, 1–14. <https://doi.org/10.1016/j.jvb.2019.06.002>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, Article 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sánchez, F. A. S., Peláez, G. I. C., & Alís, J. C. (2017). Occupational safety and health in construction: A review of applications and trends. *Industrial Health*, 55(3), 210–218.
- Schonfeld, I. S., & Mazzola, J. J. (2015). A qualitative study of stress in individuals self-employed in solo businesses. *Journal of Occupational Health Psychology*, 20(4), 501–513. <https://doi.org/10.1037/a0038804>
- Sturges, J., Conway, N., & Liefvooghe, A. (2010). Organizational support, individual attributes, and the practice of career self-management behavior. *Group & Organization Management*, 35(1), 108–141. <https://doi.org/10.1177/1059601109354837>
- Super, D. E., & Hall, D. T. (1978). Career development: Exploration and planning. *Annual Review of Psychology*, 29(1), 333–372. <https://doi.org/10.1146/annurev.ps.29.020178.002001>
- Teddle, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1), 77–100. <https://doi.org/10.1177/1558689806292430>
- Thorgren, S., Nordström, C., & Wincent, J. (2014). Hybrid entrepreneurship: The importance of passion. *Baltic Journal of Management*, 9(3), 314–329. <https://doi.org/10.1108/BJM-11-2013-0175>
- Ulrich, D., Kryscynski, D., Ulrich, M., & Brockbank, W. (2017). Competencies for HR professionals who deliver outcomes. *Employment Relations Today*. <https://doi.org/10.1002/ert.21623>
- Upadaya, K., Vartiainen, M., & Salmela-Aro, K. (2016). From job demands and resources to work engagement, burnout, life satisfaction, depressive symptoms, and occupational health. *Burnout Research*, 3(4), 101–108.
- Van Den Groenendaal, S. M. E., Rossetti, S., Van Den Bergh, M., Kooij, T. D., & Poell, R. F. (2021). Motivational profiles and proactive career behaviors among the solo self-employed. *Career Development International*, 26(2), 309–330. <https://doi.org/10.1108/CDI-06-2020-0149>
- Van der Heijden, B., De Vos, A., Akkermans, J., Spurk, D., Semeijn, J., Van der Veldek, M., & Fugate, M. (2020). Sustainable careers across the lifespan: Moving the field forward. *Journal of Vocational Behavior*, 117. <https://doi.org/10.1016/j.jvb.2019.103344>
- Van Stel, A., Millán, A., Millán, J. M., & Román, C. (2018). The relationship between start-up motive and earnings over the course of the entrepreneur's business tenure. *Journal of Evolutionary Economics*, 28(1), 101–123. <https://doi.org/10.1007/s00191-017-0499-3>
- Wach, D., Stephan, U., & Gorgievski, M. (2016). More than money: Developing an integrative multifactorial measure of entrepreneurial success. *International Small Business Journal*, 34(8), 1098–1121. <https://doi.org/10.1177/0266242615608469>
- Whitmarsh, L., Brown, D., Cooper, J., Hawkins-Rodgers, Y., & Wentworth, D. K. (2007). Choices and challenges: A qualitative exploration of professional women's career patterns. *The Career Development Quarterly*, 55(3), 225–236. <https://doi.org/10.1002/j.2161-0045.2007.tb00079.x>