Anchors of entrepreneurial careers - expanding an understanding beyond firm-founding

Anchors of entrepreneurial careers – expanding an understanding beyond firm-founding

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Abstract

Purpose – Entrepreneurial careers have mainly been defined by engagement in firm-founding. This understanding not only excludes intrapreneurship but also lacks insights into what individual motivations and values lie behind people choosing entrepreneurial careers over a longer time. This study applies Schein's career anchors to increase the understanding of entrepreneurial careers, including then how they are distinguishable from nonentrepreneurial careers.

Design/methodology/approach – In-depth interviews covering ten or more years of career were conducted with 55 graduates from a master-level program in entrepreneurship and business design at a technical university, thereby emulating Schein's 1970s original anchor study of MBA graduates from MIT.

Findings – Anchors were associated with 41 entrepreneurial and 14 nonentrepreneurial careers. Entrepreneurial careers were much more often attributed to anchor dyads as compared with nonentrepreneurial careers attributed to single anchors. The General management anchor was the only prevalent anchor for both types of careers, but with a more team-oriented and interpersonal focus for entrepreneurial than nonentrepreneurial careers, resulting in a suggested anchor split.

Practical implications – Implications are made for entrepreneurship policy and higher education.

Originality/value – Studying entrepreneurial and nonentrepreneurial careers through identifying dyads of career anchors is new, allowing both career theory expansion and generation of hypotheses.

Keywords Entrepreneurial career, Entrepreneurship, Intrapreneurship, (Self-)employment

Paper type Research article

Introduction

The prevalent notion of an entrepreneurial career is an individual founding a firm and subsequently growing or maintaining the firm for economic benefit (Hisrich *et al.*, 2017). The role "entrepreneur" is then identified through the firm-founding moment – a perspective which misses what precedes and follows this discrete action in time (Thorgren and Williams, 2023), as well as any entrepreneurial behavior not including firm-founding, such as intrapreneurship. Emphasizing an episodic founding moment is counterintuitive to the prevalent understanding of a career in general, defined as a progressive sequence of work behaviors over time (Defillippi and Arthur, 1994; Arthur *et al.*, 1989). There is need for additional theory addressing individuals acting entrepreneurially to define themselves in relation to their work, given current limited discussion of how entrepreneurial behavior is presented in occupational settings.

To better understand entrepreneurial careers beyond firm-founding, this article investigates career anchors (Schein, 1985, 1996) of individuals with ten to 25 years of post-graduate career experience. A career anchor is defined as a self-concept individuals hold in relation to their

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work, and constitutes a stabilizing force for career decisions (Schein, 1996). Interviews were conducted with 55 graduates from a master-level program in entrepreneurship and business design at a technical university; a program found to produce many entrepreneurial careers (Alsos *et al*., 2023).

The empirical sample in this study emulates that of Schein's original career anchor study, based on privileged MBA graduates from MIT and conducted in the 1970s and refined in the 1980s. The studies are similar in that both populations experienced abundant conditions of work and career opportunities, thus allowing for study of individual's personal values and motives guiding decisions. The studies differ as the Master of Science program in this study, unlike most MBA programs, focuses on technology-based business development using a learning through venture creation approach (Lackéus and Williams-Middleton, 2015). Thus, this study's population sample is expected to include higher occurrence of entrepreneurial careers, whereas the MBA study of Schein aimed for a wider study of careers in general (and not just entrepreneurial careers).

Schein's initial research (Schein, 1985, 1990) stipulated that individuals establish one career anchor that governs their choice of work over time. Subsequent work by Schein *et al*. (2023) recommend studying multiple career anchors, as single anchors are not seen to capture the "patterns of preferences" (Schein *et al*., 2023, p. xiii) individuals consider in their career decisions. This study investigates multiple anchors through investigating individual entrepreneurial behavior over time in a career, with the empirical question: *What are prevalent anchors of entrepreneurial careers?*

In this article, entrepreneurial careers are defined as careers that emphasize developing and validating new business ideas as an individual's prime work task over time, building upon an entrepreneurship definition of Prince *et al*. (2021). This includes firm-founders, but also intrapreneurs, individuals engaging in specific phases of a new venture, and others fitting the definition. Empirical analysis involved three investigators independently identifying a maximum of two anchors per interviewee and then refining the thematic analysis through integration of individual coding.

The article is structured as follows. A review of literature presents translation of career theory concepts for addressing gaps in entrepreneurship research, culminating in focused language for theoretical framing and analysis. The method section explains the study design and approach to coding and analysis. Next, results are presented followed then by a discussion, including theoretical and practical contributions, as well as policy implications.

Literature review

Previous work addressing entrepreneurship and careers is limited, with varied perspectives applied. Burton *et al*. (2016) calls for emphasis on transition into and out of entrepreneurship (described as firm-founding) to understand how being a firm-founder fits in relation to other employment positions of one's career. Burton *et al*. (2019) takes a labor market perspective to understand various factors influencing and influenced by employment of, by and for entrepreneurs(hip). These and other works have emphasized occupational pathways toward an individual ultimately engaging in firm-founding, recognizing that individuals take on other employment opportunities after graduation over a significant time period, prior to founding a firm (Sorgner and Fritsch, 2018).

With a firm-founding perspective, one is only an entrepreneur and has an entrepreneurial career after the act of founding (Burton *et al*., 2016; Hegde and Tumlinson, 2021). Thus, entrepreneurship is treated as an outcome, rather than a discipline applied to one's work, progressing over time, such as in engineering or medicine (Duval-Couetil and Long, 2014; Williams-Middleton and Donnellon, 2017). Some research instead recognizes the entrepreneurial process but then lacks a clear delineation of when the entrepreneur-ing diminishes, i.e. when actions become about running and optimizing, rather than developing and validating new business ideas. This distinction, developing and validating new business

ideas, is in accordance with Prince *et al*. (2021), and is the ground used to distinguish between being entrepreneurial and being nonentrepreneurial.

Rather than limiting entrepreneurship to a discrete firm-founding moment, an entrepreneurial career is better understood as one where the individual's core occupational focus remains on creating, validating, and advancing new business ideas over time (Prince *et al*., 2021). In contrast, careers where the primary tasks involve applying, executing, or refining already validated knowledge – without sustained new idea development – are classified as nonentrepreneurial. Under this distinction, firm ownership or managerial responsibility alone does not necessarily equate to an entrepreneurial career if the individual's primary activities no longer involve substantive opportunity creation (Schein, 1995).

For example, individuals who initially founded a venture but continued to explore new markets, introduce new offerings or lead R&D initiatives would still be considered entrepreneurial. Others, however, may transition into roles centered on managing operations, optimizing existing processes or focusing on incremental improvements rather than new idea development.

Much entrepreneurship research focuses on precursors to firm-founding, rather than what happens after firm-founding (Zhao *et al*., 2021). These precursors, whether entrepreneurial intention, entrepreneurial orientation, or entrepreneurial self-efficacy are, while referencing the theory of planned behavior (Ajzen, 1991; Lortie and Castogiovanni, 2015), accepted by many researchers as indicators of future behavior (see, for example, Bird, 1988; Marshall and Gigliotti, 2020). However, critique of this perspective argues that it lacks validation through recognized actual behavior (Aadland *et al*., 2024; Lundqvist *et al*., 2015). Along this line of reasoning, Clark *et al*. (2024, p. 380) argue for the need to study "... individual beliefs toward new value creation, and the processes *and behaviors that result* [1]." Such a perspective is in line with general career anchor literature (Hall, 1996; Schein, 1996), and builds understanding of how entrepreneurially acting individuals define themselves in relation to their work, given limited discussion of entrepreneurial behavior presented in occupational settings (beyond firm founding).

Career anchors

A career anchor is a concept that is used to capture how individuals define their core motivation for sustained and strategic choices (i.e. the anchor) in their sequence of work experiences over time (i.e. the career) (Schein, 1985). Schein *et al*. (2023) describes a career anchor as having three independent but also interrelated components: (1) skills and competencies; (2) motives and (3) values. The third component, values, is derived from the individual's reaction to a variety of norms and belief systems encountered in different social and work situations. Taken together, a career anchor comprises behavioral and intrinsic personal dimensions (Schein *et al*., 2023; Schein, 1996; Feldman and Bolino, 1996; Nordvik, 1991). Schein's objective with developing the typology of career anchors was to help individuals, through self-insight, decipher their own prioritizations when taking career decisions.

Since their introduction, career anchors have undergone validation as well as conceptual development (Schein *et al*., 2023). One common operationalization of career anchors is in the Career Orientation Inventory developed by Schein and colleagues as a practical tool for career (self-)assessment. However, this indexing function, while useful, tends to simplify and reduce the complexity of career anchors into discrete, singular, measurable outputs, and thus is not seen to fully capture the deeper, qualitative essence of career anchors, something Schein *et al*. (2023) argue for when uncovering individuals' self-concept at work. This study emphasizes the *strategic grounding* embodied in career anchors as holding explanatory qualities for one's career path as salient with a self-concept (Dlouhy and Biemann, 2018; Sugiyama *et al*., 2024; Vergne and Durand, 2010) in comparison to the future-preference perspective of career orientation.

Entrepreneurial career anchors

Schein's original "Entrepreneurial creativity" career anchor associates exclusively with firm-founding, arguing that the "intrapreneurial" perspective was "irrelevant" because if one has the Entrepreneurial creativity anchor, then one would eventually leave an organization to found a firm (Schein, 1996). Other studies (Danziger *et al*., 2008; Marshall and Bonner, 2003) have argued to divide Schein's original anchor into independent Creativity and Entrepreneurship, anchors, to reflect key distinctions of behavior. Kao (1989, p. 18) argues that "the capacity to develop new ideas, concepts, and processes [i.e. creativity] is not the same as the capacity to make things happen, to implement in practical terms [i.e. entrepreneurship]" which is supported in additional studies (Hisrich *et al*., 2005; Rosso, 2014).

Table 1 presents the adaptation of Schein's initial career anchors reflecting these views, thus resulting in nine general career anchors.

A further rationale for the distinction between Creativity and Entrepreneurship can be drawn from de Bruin and Lewis (2004, p. 639) who "apply a broad 'continuum of activity' approach to the meaning of entrepreneurship. This ensures the encompassment of a range of activities from self-employment to intrapreneurship in larger organizations". A distinct and broad anchor – Entrepreneurship – is considered viable as there is precedence for broad applicability in Schein's other anchors. For example, individuals with the Service/dedication to a cause anchor are found in every profession, not just in social work or environmental services. Hence, Entrepreneurship as a career anchor is argued as viable across a spectrum of professions and a variety of employment forms.

Studies have argued for a multiple career anchor approach (Feldman and Bolino, 1996; Rodrigues *et al*., 2013; Rusko *et al*., 2019). However, Schein (1990, p. 34) initially argued that individuals cannot have multiple career anchors. If no single anchor emerges clearly, it is because "the person has not had enough life experience to develop priorities that determine how to make those choices". Nevertheless, Schein's last work presents a substantial shift in argumentation, abandoning the singularity perspective: ". . . it is not particularly accurate nor helpful to think in terms of *an anchor* compared to thinking of a pattern of preferences reflected in what job decisions we have made, which helps guide what job optimizations we

Table 1. Description of career anchors adapted from Schein

Career anchor name	Career anchor description
Security/stability	As feeling economically secure and stable
Autonomy	As having work life under one's own control and a resistance to rules and routines
Technical/functional	As exercising particular talent and seeking peer recognition and avoidance of general management work
General management	As a desire to raise to a high level affecting the performance of the organization and making tough decisions, having skills to analyze and synthesize information together with interpersonal/emotional skills
Entrepreneurship*	As creating a business, where success is due to your own effort. Initiates and validates new enterprises rather than managing established ones
Creativity*	As creating and developing something, often an idea into a product or service, based on personal engagement and drive
Service/dedication to a cause	As a career based in core values that improves the world
Challenge	As overcoming impossible barriers such as competitors, challenges or extreme turnaround cases
Lifestyle	As work and life (family and/or personal growth needs) are integrated and balanced

Note(s): *Originally presented as one anchor – Entrepreneurial creativity – by Schein (1985) subsequently separated as per Danziger *et al*. (2008) and Marshall and Bonner (2003)
Source(s): Table created by authors

have and would like to make" (Schein *et al*., 2023, p. xiii). This specific argument underlines a practical rationale that emerges from reflection upon indexing results: that the individual "receives" one career anchor even though they might qualify for multiple career anchors, but are confined to the rigidity of the metric.

In sum, studying entrepreneurial careers through multiple career anchors over time provides explanation of career path salience with one's self-concept, as multiple anchors can better illustrate patterns of preferences in career decisions. Apart from the original Entrepreneurial creativity anchor (then split into an Entrepreneurship and a Creativity anchor), there is potential for most anchors to appear in entrepreneurial careers, at least in combination with other anchors. However, thus far, there have not been any studies capturing multiple anchors in general, nor have there been studies specifically addressing entrepreneurial careers, which is thus the motivational ground for the empirical study presented in this article.

Method

The study investigates the careers of graduates from a two-year master's-level entrepreneurship program, where the likelihood of identifying entrepreneurial careers is deemed even higher than in Schein's original study of MBA graduates at MIT. With the objective of investigating careers, following the definition of Arthur *et al.* (1989), data collection was directed to the earliest cohorts (a population of 272 graduates from 1997–2007), thus having ten or more years of work experience at the time of study. From this target population, a sample of 55 individuals was interviewed (see Table 2). Selection was based upon a search for a variety of careers, and a relative representativeness of the population demographics.

Semi-structured interviews were conducted in two batches: June through December 2017, and June through September 2021. Both batches are included as equal empirical ground [2]. Interviews were conducted in both Swedish and English, depending on the comfort level of the interviewee. For those conducted in Swedish, when translating to English, both a native Swedish speaker and a native English speaker reviewed the original and translated transcript to ensure that the intended meaning is carried forward in the translation.

The interview protocol involved three blocks of questions. The first block of questions addressed career stages; specifically, what motivated the interviewee to change occupation position, particularly when transitioning between organizational boundaries. Interviewees were also asked to account for types of roles when transitioning, and how this potentially connected to competency development. For each new position, interviewees were asked to elaborate on their entrepreneurial behavior, including entrepreneurial activities they engaged in, with a special interest paid to how much business idea development and validation was part of the work. This allowed for distinguishing entrepreneurial careers from nonentrepreneurial careers. The second set of questions focused on identity, both role and self-concept; specifically asking interviewees for examples of ways (if any) they see themselves as being entrepreneurial. Taken together, the chosen method and inquiry themes captured both behavioral and intrinsic personal considerations of the career anchor construct, with the specific aim to consider entrepreneurial behavior and professional self-concept attributed through more than one anchor (Schein *et al*., 2023; Schein, 1996; Feldman and Bolino, 1996; Nordvik, 1991). This approach also addresses the limitations previously stated regarding the singular outcome described through one anchor.

The interview protocol was developed in parallel with career anchor theory (and practice) evolution. This is recognized in the overall similarity of interview questions and research design as proposed by Schein *et al*. (2023).

Analysis of interviews

Data analysis involved the three authors independently assigning career anchors based on the transcribed interviews and access to secondary data (primarily self-reported), with the

Table 2. Interviewee demographics post-VCP at time of interview

Pseudonym	Gender	Years of career experience	Primary industry
P01	Male	19	Trade and Logistics
P02	Male	15	Biotech and Medtech
P03	Male	14	Transient
P04	Male	16	Transient
P05	Male	14	Marketing and Branding
P06	Male	17	Legal
P07	Male	18	Transient
P08	Male	18	Professional Services
P09	Female	21	Information Technology
P10	Male	14	Information Technology
P11	Male	16	Telecom
P12	Male	15	Energy and Environment
P13	Male	21	Automotive
P14	Male	14	Finance
P15	Male	15	Legal
P16	Male	15	Manufacturing
P17	Male	14	Biotech and Medtech
P18	Male	21	Information Technology
P19	Male	20	Automotive
P20	Female	20	Innovation and R&D
P21	Male	15	Biotech and Medtech
P22	Male	15	Transient
P23	Female	15	Transient
P24	Male	24	Telecom
P25	Male	19	Information Technology
P26	Male	15	Health and Food
P27	Male	20	Telecom
P28	Male	14	Trade and Logistics
P29	Male	20	Trade and Logistics
P30	Male	14	Sales
P31	Female	16	Transient
P32	Male	23	Information Technology
P33	Male	18	E-commerce
P34	Male	19	Biotech and Medtech
P35	Male	20	Biotech and Medtech
P36	Male	17	Finance
P37	Female	19	Automotive
P38	Male	21	Education
P39	Male	21	E-commerce
P40	Male	20	Energy and Environment
P41	Male	14	Information Technology
P42	Male	22	Health and Food
P43	Male	16	Sales
P44	Male	23	Biotech and Medtech
P45	Male	20	Innovation and R&D
P46	Male	20	Transient
P47	Male	20	Information Technology
P48	Male	17	Automotive
P49	Male	20	Trade and Logistics
P50	Female	20	Automotive
P51	Female	23	Information Technology
P52	Male	21	Automotive
P53	Male	18	Professional Services
P54	Female	17	Events
P55	Female	19	Finance

Source(s): Table created by authors

descriptions in Table 1 as the main lens. For each interviewee, up to three career anchors were identified and prioritized from most to least salient. In Table 3 a coding example is offered. Major pivotal changes constituting a "new stage" of one's career were considered first, and then the overall career pattern. If anchor identification was difficult, the authors made notes regarding characteristics considered relevant over time. Once independent work was complete, each author's attributions were compared and then aggregated for joint thematic attribution. Interviewees were designated with an anchor only if two of the three authors identified the anchor. This process resulted in a list of plausible career anchor configurations and a first template of synthesized description for each configuration. In the second iteration of the data analysis process, the career anchor configurations were evaluated against the empirical material independently by the authors. This evaluation served to complement the anchor configurations with the interviewees' own descriptions of their entrepreneurial behavior.

Findings

Findings are summarized in Table 4, listing the identification and frequency of career anchors in individual and paired configurations. In Tables 5–8, each career anchor configuration is exemplified through selected quotes and a synthesis of interview themes to provide an enriched description. The patterns identified in Table 5 through Table 8 address configurations that have at least two representative interviewee careers.

Entrepreneurial career anchor combinations

Focusing on the General management anchor, Table 5 presents a synthesized description and illustrative quotes of career anchor configurations with Creativity and Challenge, respectively. When General management co-occurs with Creativity, interview narratives and reflections emphasize being trusted to develop business ideas while also having an interest in team leadership. When General management co-occurs with a Challenge anchor, interview narratives show individuals engaging in turnaround challenges that no one else aspires to, while finding motivation in uncertainty and working through others, but mostly without a focus on new business idea development. Hence, this is the only anchor dyad not including any of the original entrepreneurial anchors of Creativity or Entrepreneurship. This can be seen as a matter of anchor salience and one of these anchors could appear if the method had allowed anchor triads.

Table 6 summarizes Creativity as a singular anchor and co-occurring with anchors Challenge, and Technical/functional, respectively. Creativity as a career anchor represents personal investment in developing new products or services. As a stand-alone anchor, it holds sole explanatory qualities for three of the interviewee careers, with emphasis on the creative processes as the core motivation. When Creativity co-occurs with a Technical/functional anchor, then it captures a career being detailed and even "nerdy" about product development while also caring about the whole product. When Creativity is paired with Challenge, a substantial part of the motivation for engaging in new business or product development stems from challenging structures, including a motivation to challenge oneself under uncertainty.

Focusing on the Entrepreneurship anchor, Table 7 presents a synthesized description and illustrative quotes of career anchor configuration where General management, Challenge, Autonomy, and Creativity co-occurs, respectively. In the seven interviewee careers where Entrepreneurship co-occurs with General management, the founding and growth of the firm provides a specific and concentrated context in which one can also engage in using interpersonal skills. The five interviewee careers where Entrepreneurship co-occurs with a Challenge display cyclic engagement in early-stage ventures, often founded by others, where the challenge is to take on CEO responsibility to validate the venture. Careers where Entrepreneurship co-occur with Autonomy involve firm-founders desiring high levels of self-

Table 3. Example empirics

(Summary of interview data) Example case[1]	Author	Career anchors[2]	(Compiling first-order themes) Synthesis of authors' individual coding	(Thematic categorization) Compiling of authors' individual descriptions into one description of entrepreneurial career anchor configuration	(Thematic coding) Career anchor Dyad[3]
X enjoys the corporate setting and has quickly climbed to CEO positions in a few small/ medium businesses. X chose a corporate job due to having a family (partner and kids) and wanting a stable salary. X explicitly says they are no specialist but enjoys working with leadership . X says that entrepreneurial activity has increased with each job (specifying needing judgmental abilities in connection to uncertainty). The main roles and interests are connected to organizational building. X enters companies that need new radical change (pivot). This involves formulating the new trajectory and building a structure around that new vision. Also, X reflects on needing intrapersonal skills for aligning the people in the organizations for the new directions.	1	(1) General management (2) Creativity	Focus on new organizational management and team leadership. There is a strong need to be personally creative around new business trajectories, while exercising interpersonal skills and team leadership. Typically negotiates trust from corporate stakeholders to take command of the new business and product development. Salary and being trusted more important than legacy or ownership	This individual excels in generating and implementing innovative projects by synthesizing information, utilizing interpersonal and emotional skills, and embracing the self-directed nature of the creative process. Their motivation stems from this creativity, which not only applies to new products and services but also cultivates trust among stakeholders. This trust, in turn, grants them autonomy and entrepreneurial opportunities. Their focus is on creative development, often linked to specific projects, supported by ample resources. Their ultimate aim typically leans more toward establishing new businesses or business trajectories rather than solely introducing new products, driven by a need for speed and a desire to stave off boredom	Creativity + General management
	2	(1) General management competence (2) Security/ stability (3) Creativity	Ideates and implements new projects, through synthesizing information-, interpersonal-, and emotional skills. Finds motivation in self-directiveness of the creative process around new products/services and negotiates a high level of trust from stakeholders, resulting in autonomy for the individual		
	3	(1) General management competence (2) Creativity (3) Security/ stability	Heavy focus on creation and development, often connected to a project or object, but with a resource baseline to build from; and often the goal is more new business than a new product itself; speed or not getting bored seems to also be a key motivation		

Note(s): [1]Each interview resulted in rich data and the transcript material covers 50–70 min of data for each interview. This is the author team's internal summary utilized in the comparison and discussion of authors' individual findings. This illustrative case is summarized along themes identified [2]Authors were consistent in identifying and coding entrepreneurial competencies, identifying career anchors resulted in three anchors with different rankings [3]The final career anchor dyad assignment was made through (1) general management placed as number 1 by two authors; (2) creativity identified by all authors and ranked as first by one author; (3) security/stability identified by two authors, ranked second and third respectively, which was later determined to be a less salient theme than the two anchors that was coded in more consensus

Source(s): Table created by authors

Table 4. Occurrence of career anchors (single or paired) to entrepreneurial careers and nonentrepreneurial careers

n	*Anchors attributed to entrepreneurial careers*	
10	Creativity	General management
7	Entrepreneurship	General management
5	Entrepreneurship	Challenge
3	Challenge	Creativity
3	Creativity	
3	General management	Challenge
3	Creativity	Technical/functional
2	Entrepreneurship	Autonomy
2	Entrepreneurship	Creativity
1	Service/dedication to cause	Entrepreneurship
1	Technical/functional	Entrepreneurship
1	Creativity	Autonomy
41	Sub-total of interviewees coded as having entrepreneurial careers	
n	*Anchors attributed to nonentrepreneurial careers*	
4	General management	
4	General management	Autonomy
2	Technical/functional	
1	Technical/functional	Security/stability
1	General management	Technical/functional
1	General management	Security/stability
1	Security/stability	
14	Sub-total of interviewees coded as having nonentrepreneurial careers	
55	Total of interviewees	

Source(s): Table created by authors

directiveness. The final configuration of co-occurrence with Creativity presents the creative process as central, with a focus on business and product development as well as validation.

Nonentrepreneurial career anchor combinations

Nonentrepreneurial careers with anchors occurring more than once are shown in Table 8. In the four interviewee careers having General management as a single anchor, the findings capture interviewee interest in defined management positions, where decision-making under relative certainty is core. Careers with General management and Autonomy anchors co-occurring display the progression of self-directiveness through climbing the corporate ladder. Here, freedom is a main reason for career advancement between relatively defined managerial positions. Finally, interviewee careers attributed with a single Technical/functional anchor illustrate a focus on specific aspects of technology and product development, in comparison to the overall product or working with people.

Discussion

The discussion will first focus on anchors distinguishing entrepreneurial careers. Secondly, entrepreneurial careers will be compared with nonentrepreneurial careers. Career anchor theory is then both expanded and revised, including hypothesis generation. A split of the General management anchor is suggested. Finally, some implications for policy and entrepreneurship education are formulated.

Prevalent anchors distinguishing entrepreneurial careers

With only three exceptions, all entrepreneurial careers have an attributed Creativity anchor ($n = 22$), an Entrepreneurship anchor ($n = 18$), or both these anchors ($n = 2$). Since these two

Table 5. General management anchor and co-occurring anchors

	Synthesized description	Illustrative quotes from interviews
General management and creativity	Personal engagement developing business ideas, including new product and market development. Works through a strong organizational position, often high up in the organization, where interpersonal skills and making tough decisions are core abilities	It is about the business, changing things and making things better. . . Leadership and interpersonal skills are important (Interviewee P19) There were no clear borders as to what I did in my job. A lot of it was up to myself to decide. It requires that you yourself have a lot of curiosity and an open mind. There are different types of changes, but I feel for my own personal preference I am very comfortable with that. . . I almost feel anxious when things stay the same too much. I have been given a lot of rope, meaning I have had bosses who have not really been looking over my shoulder, but rather trusting me to do the job (Interviewee P50) Another common theme [for me] has been entrepreneurship and being start-up oriented through building new businesses under the umbrella of large corporations. Combining start-up mentality with a large corporation structure and executing abilities. If you can make these two aspects work together, it usually ends up working quite well, but it is difficult to achieve. So, the common theme is to build new businesses in the context of a large corporation (Interviewee P52)
General management and challenge	Specific tough challenges in firm creation, growth or doing turn-arounds, attract and drive the individual to have cyclic careers of seeking new challenges, once the previous one is accomplished. Specialization occurs around the type of new business challenge, but mostly through also being the managing director, and having shares if possible	. . . "now we need someone to root around and fix the challenge". After all, there is no failure in such a mission – if it doesn't work, it doesn't work. . . I probably nurtured the [persona] "turnaround Messiah" who fixes things (Interviewee P48) . . ."Head of Issue Management". . . I got to work with pretty much all functions of the company, and I had unlimited resources and capital that were needed to solve any potential problems. I am comfortable when I don't know what I am going to find, and I think that is a part of why the job is exciting and fun. A lot of people find it tough when working with uncertainties and unknown elements, but I think it's exciting (Interviewee P04)

Source(s): Table created by authors

anchors were not at all attributed to nonentrepreneurial careers, it is fair to recognize Schein's original Entrepreneurial creativity anchor in the current study. However, only two careers were found to have both Creativity and Entrepreneurship anchors, which confirms and reinforces the split of the original anchor into the independent Creativity anchor and independent Entrepreneurship anchor (Danziger and Valency, 2006; Danziger *et al.*, 2008; Marshall and Bonner, 2003). In this study, the split is illustrated by those primarily engaging in new products

Table 6. Creativity anchor with co-occurring anchors

	Synthesized description	Illustrative quotes from interviews
Creativity	Is driven by the creative process of developing new products or services	I am an intrapreneur, not an entrepreneur. . . Having [top management's backing] and being quick footed, has given me operational and creative freedom (Interviewee P27) I am not attracted by the manager position because then I have had to sacrifice the hands-on experiences of technology that I actually like. . . With that said I am not a technology developer in that sense but more a "spider-in-web" in that process [new business development and validation] (Interviewee P40)
Creativity and challenge	Identifies and implements new challenging business activity within established corporations, seen by others as challenging, radical or disruptive. Once it is accomplished, a new challenge is pursued. The types of challenges are specific, such as sales	I have tried to do difficult new things. I am a man without characteristics, he who can do everything. . . but [I do] not *own* [emphasis added] an identity (Interviewee P03) . . . the ability to create things, create value and challenge old structures and sort of given truths. It is really exciting when you can turn something in a way it had never been done before (Interviewee P10)
Creativity and technical/ functional	Builds on the interest in technology and new products and takes pride in having deep technical insights while also contributing to new business opportunity	[I like] a bit more crazy and unconventional ideas, taking care of the unusual beyond normal business: problem-solving and strategy. . . [I] mainly work with strategic technical questions, both in the product themselves but also in the wider business context like IP (Interviewee P17) I [would] rather have a career of experiences than collecting titles. . . My main competence is data [analysis and optimization] and I have been a nerd and knowledge seeker. . . but I find motivation in "connecting the dots" and apply my knowledge in new contexts (Interviewee P33)

Source(s): Table created by authors

and services (Creativity anchor) contra those focusing on the validation of a whole new business (Entrepreneurship anchor). Three exceptions, i.e. those not having the Creativity or Entrepreneurship anchors, were careers focusing on company turn-arounds, combining General management and Challenge anchors.

Some career anchors were more frequently paired with either the Creativity anchor or the Entrepreneurship anchor. The General management anchor ($n = 17$), manifested mostly in terms of team leadership and interpersonal skills, was the most frequent pairing, followed by the Challenge anchor ($n = 8$). Interestingly, these two anchors also constituted the only dyad representing entrepreneurial careers ($n = 3$) not having any Creativity or Entrepreneurship anchors, as mentioned in the previous paragraph.

For entrepreneurial careers, the relatively low frequency of Technical/functional ($n = 4$) and Autonomy ($n = 3$) anchors and single occurrence of a Service/dedication to a cause ($n = 1$) was surprising. Theory suggested that these anchors should appear, which they did, but with relative scarcity. Future studies of entrepreneurial careers with alternative populations to

Table 7. Entrepreneurship anchor with co-occurring anchors

	Synthesized description	Illustrative quotes from interviews
Entrepreneurship and general management	Develops and validates new business through starting and growing a firm where they have the overall management role, making tough decisions and displaying interpersonal skills	It is enjoyable working with technology but also to be exposed to all human factors. It is fun to work with inspiring intelligent people and with as little politics as possible to create impact (Interviewee P21) What I do is that I find new possibilities, new options. . . I see things that others don't – connections that people don't see, and opportunities that many do not even realize are there. And when I found those things, I make new innovations and new companies (Interviewee P47) I think I will continue to start companies and build from scratch. The start-up phase, the information phase, building a base with technology, branding, etc. (Interviewee P26)
Entrepreneurship and challenge	Specific tough challenges in firm creation and growth attract and drive the individual to have cyclic careers of seeking new challenges, once the previous one is accomplished. Specialization occurs around the type of new business development challenge, but mostly through also being the managing director, also having shares in the venture	*Fearlessness* [emphasis added]. To do things no one knows the answer for yet. If you have a niched area, you have a big opportunity to create true impact (Interviewee P22) I'm not driven by money. I am driven by having fun and making the world a better place. Show up, talk to customers and make it work, to interact with people and create value (Interviewee P35) The adventure. To build something of your own. I had those choices in front of me to work with this company, where there are big resources and to develop a new [product] that might be a bit "cooler". Or I had the option to start something, completely from scratch. That was an easy choice. Doing my own thing was a lot more fun (Interviewee P44)
Entrepreneurship and autonomy	Strong motivation to become an independent business person through starting and controlling one's own firm. Focus is on control, freedom and not having to comply with rules or procedures created by others	I felt I probably would thrive quite well in the early stages [in firm formation] – from scratch and build around it. When you are a small group, not so much organization to care about, everyone knows everything. I really like when it's a bit of blank paper at the beginning. . . and [I] really like to ideate with co-founders. . . I have taken huge risks. Risked a lot of my own time and got it back very well (Interviewee P25)

(*continued*)

Table 7. Continued

	Synthesized description	Illustrative quotes from interviews
Entrepreneurship and creativity	Motivation to start and control a firm, while also being highly involved in every aspect of the new business activities. Cares about legacy both around the firm as well as its new products or services	. . . [Ideating] and creating new technologies has always been in the forefront. Also, I have a desire to create something not been done before and testing that it works (Interviewee P32) . . . live with that combined feeling of uncertainty and freedom. Design is not about drawing funny/pretty/good looking products, it is more about positioning a product in the right way to the right segment, and doing so with the values that the customer stands for (Interviewee P45)

Source(s): Table created by authors

Table 8. Main nonentrepreneurial careers

	Synthesized description	Illustrative quotes from interviews
General management	Has the drive to be a diligent manager, climbing the corporate ladder, while making tough decisions. Interest into displaying interpersonal skills. Efforts are directed toward efficiency and not toward developing new solutions	Overall, it is the general management, strategy and staff leadership that consumes most of the time (Interviewee P38) . . . reaching a higher position and being part of the decision making has always been sort of a goal for me (Interviewee P43)
General management and Autonomy	Seeking managerial proficiency, including interpersonal skills and making tough decisions, as a way to gain autonomy and a sense of independence and autonomy. Wants to be "on top of things," not having to adapt too much to others, but does not specifically engage in new business activity	I still seek the perfect job – that is my drive. Sometimes I want to start something of my own. . . However, I have become comfortable – have a good team and make good money (Interviewee P05) Difficult to work entrepreneurially in inert organizations which most are. [I have] more of an entrepreneurial personality than competence (Interviewee P36)
Technical/ functional	Being functionally proficient in developing solutions. More introverted and inward looking at a company's product. No desire to have contact with typical other business development, such as sales and marketing	I felt I had to downplay an entrepreneurial role, since the technical, and other expertise was what my employers wanted (Interviewee P15)

Source(s): Table created by authors

this study should be investigated before suggesting that the top four anchors found here (Creativity, Entrepreneurship, General management and Challenge) are generally prevalent in entrepreneurial careers. However, this study does pinpoint both General management anchor (displaying primarily then team leadership and interpersonal skills), and Challenge anchor (repeatedly taking on specific tough situations), to coincide frequently with Creativity or Entrepreneurship anchors. General management or Challenge anchors occurred in two-thirds of the entrepreneurial careers, thus being nearly as prevalent as Creativity or Entrepreneurship anchors.

Contrasting entrepreneurial from nonentrepreneurial careers

Table 4 distinguishes between the 41 entrepreneurial careers and the 14 nonentrepreneurial careers. An initial main observation is that individuals with entrepreneurial careers more frequently have anchor dyads (93%) when compared to those with nonentrepreneurial careers (50%). There are no prior anchor-dyad studies, at the time of writing, so this difference requires special attention. One interpretation is that multiple anchors are beneficial when dealing with the uncertainty of developing and validating new ideas. If one does not rely exclusively on, for example, a Creativity anchor when facing uncertainty in work experience, but also has a grounded self-concept in, for example, team leadership (General management), then this provides explanatory value for why dyads are much more frequent for entrepreneurial careers. In a nonentrepreneurial career, it is found that one can more often rely upon a single anchor. Nonentrepreneurial careers do not readily experience significant uncertainty and hence could be seen as more defined and contained.

Nonentrepreneurial careers, with the exception of those with the General management anchor, are attributed with anchors less commonly associated with entrepreneurial careers: Technical/functional ($n = 4$), Security/safety ($n = 3$) and Autonomy ($n = 1$). These three anchors can be associated with more controllable, thus less uncertain, task environments and provide contrast when compared to the Creativity, Entrepreneurship and Challenge anchors. Furthermore, interviewees with the General management anchor in a nonentrepreneurial career displayed a more stable, predictable and optimizing management competence, as compared to interviewees with the General management anchor in entrepreneurial careers. The difference appeared in how the General management anchor connected to specific behavior and suggests potential for revision of career anchor theory relative to this anchor.

Revising career anchor theory

While this article aims to enrich understanding of entrepreneurial careers, some findings motivate a revision of general career anchor theory. First, the significant value of acknowledging multiple anchors per career, as recently suggested by Schein *et al*. (2023), is confirmed, especially for entrepreneurial careers. Next, while it is too soon to conclude that nonentrepreneurial careers are much more likely to be single-anchored, the findings do support such a hypothesis, as discussed in previous sections of the article.

Furthermore, while the General management anchor frequents both entrepreneurial careers and nonentrepreneurial careers, findings provide support to split this anchor into two distinct anchors. The General management anchor associated with 20 of the 41 entrepreneurial careers of interviewees interpersonal and emotional skills, along with team leadership. The General management anchor associated with eleven of the 14 nonentrepreneurial careers of interviewees emphasizes optimization and managing within predictable structures, rather than developing new business ideas. General management anchor comprises "a desire to raise to a high level affecting the performance of the organization and making tough decisions, having skills to analyze and synthesize information together with interpersonal/emotional skills" (see Table 1). The findings of this study clearly emphasize the interpersonal/emotional skills for entrepreneurial careers, and the "affecting the performance of the organization" for nonentrepreneurial careers. Thus, following the precedence of Danziger *et al*. (2008) and Marshall and Bonner (2003) proposed split of the Entrepreneurial Creativity anchor into two anchors (Creativity and Entrepreneurship), the findings of this study provide argumentation to split General management into one anchor emphasizing team-leadership, interpersonal/emotional skills and one anchor which emphasizes utilizing/optimizing given resources. The latter does not exclude interpersonal skills but presents a leadership style that is more predictable to followers. Based on the findings, this article suggests splitting the General management anchor into a *Team leadership* anchor, associated with interpersonal/emotional and visionary skills, and an *Efficiency management* anchor, associated with utilizing/optimizing given resources. This construct split (Fisher and Aguinis, 2017) is suggested to further improve the relevance of career anchors.

Implications for policy and education

The study offers implications for policy and educational practice within the field of entrepreneurship. Entrepreneurship policy is often aimed at the matching of opportunity and individuals willing to pursue opportunity (Aldrich and Yang, 2014). Such a policy then has a focus on knowledge and innovation hubs and "hot spots" where opportunities can be recognized and enabled. Given the current findings, this might not be the most viable approach for encouraging more entrepreneurial behavior. Rather, a recognition of entrepreneurial careers, where individuals develop and validate new business ideas while guided by a specific combination of career anchors, would allow individuals to decipher their own career priorities as aligned with their own self-concept. There is then reason to believe that such individuals, grounded in multiple anchors, will continue to pursue and validate new business ideas, repeatedly, and for decades. Many then have, for example, Team leadership or Challenge anchors that guide them to connect with opportunity while not having to personally be in the opportunity recognition nexus, as assumed in much policy today. In other words, through appreciating multiple anchors of entrepreneurial careers, there can be a widening of perspective for how and where development and validation of new business ideas occur. Knowledge-based hubs, such as those around universities, remain important. However, the current study displays entrepreneurial careers, previously not recognized, that connect with and contribute to idea development and validation, far beyond the firm-founders.

A main implication is that universities need to acknowledge the anchor-based perspective explaining the findings of this study. Since anchors grow from skills, competence, motivations and values, universities should not only offer shorter and more inspirational and training-oriented courses, but also longer-term programs allowing entrepreneurial careers to be rooted in more than one anchor, through emphasis on more experiential curriculum with connection to self-concept, and developing an entrepreneurial team role (Lundqvist *et al*., 2015). While shorter courses might temporarily increase entrepreneurial intent (Eesley and Lee, 2021) and raise awareness and affinity to new business activity, students in these courses do not necessarily build the personalized entrepreneurial competencies (and ultimately career anchors) that longer and more experiential programs can offer. In short, entrepreneurship education should focus more on students identifying and strengthening career anchor combinations, rather than simply increasing entrepreneurial intent.

Limitations and future research

The study is from a specific context and population, and the majority of graduates represent a culturally homogenous group. High social security and an outspoken desire from policymakers in educating an entrepreneurial workforce, provide career mobilities between paid and self-employment as relatively possible compared to countries with more limited options. Nonetheless, distinct types of entrepreneurial careers are found despite the vast spectrum of possibilities following an entrepreneurship education. Entrepreneurial careers in the current study are not a result of necessity, but are rather self-directed, such as developing one's entrepreneurial self-concept and competence in associated work, and through acknowledging career anchors. This study thereby emulates Schein's original study of MBA graduates from MIT. While strong agency and freedom of choice are prevalent in both studies, they also focus mainly on careers within business environments and technology-based innovation, rather than, e.g. social or more lifestyle-oriented occupation. This limitation needs to be recognized.

Conclusion

This study has used Schein's general career anchors to deepen our understanding of entrepreneurial careers, and how they then also are distinguishable from nonentrepreneurial careers. Recognizing that most entrepreneurial careers have multiple (dyadic) anchors is a

key contribution of the study, also validating the revised theorizing of career anchor use (Schein *et al*., 2023).

Prior to this study, received wisdom about entrepreneurial careers was centered around firm-founding and little was known about how entrepreneurial careers evolved over time. Knowledge about entrepreneurial careers not including firm-founding, such as intrapreneurship, was limited. Emulating Schein's Anchor study of MBA graduates from MIT, the current study, first, can conclude that just like other careers in, e.g. medicine, engineering or law, entrepreneurial careers display strong stability over time in terms of the career anchors individuals base career decisions upon. Secondly, the studied entrepreneurial careers mostly rely on four career anchors: Creativity, Entrepreneurship, General management (emphasizing team-leadership and interpersonal skills) and Challenge. These careers are anchored not only in Creativity or Entrepreneurship but also in taking on specific challenges no one else would do (Challenge), or utilizing team and interpersonal skills (General management) in combination with intrapreneurship, firm-founding, etc. Hence, the current study confirms Schein's study in that Entrepreneurial creativity (Schein's original anchor, later split into Creativity and Entrepreneurship anchors) is still prevalent. However, through the focus on career anchor dyads, current understanding is expanded to include the importance of multiple anchors (mainly then Creativity, Entrepreneurship, General management and Challenge anchors), thus supporting the generated hypothesis that entrepreneurial careers benefit more from multiple anchors than nonentrepreneurial careers, as then a means of appreciating and dealing with uncertainty.

Echoing the split of Schein's original Entrepreneurial creativity anchor, this study suggests a split of the General management anchor into Team-leadership and Efficiency management anchors. Both these anchors capture important but different aspects of what has been associated with General management. Both also assume a desire to be a leader, and work with and through others. However, the Team leadership anchor was prevalent for entrepreneurial careers focusing on the development and validation of business ideas, whereas the Efficiency management anchor was associated with many nonentrepreneurial careers, focusing on optimization and efficiency.

In emulating Schein's original study of MIT graduates, this study also displays the same strengths and weaknesses. Respondents were picked from a privileged group of graduates being in the nexus of technology, business and innovation. It is therefore likely that some anchors are overrepresented, while others, such as Dedication to a cause, Lifestyle and Autonomy are underrepresented. However, while entrepreneurial careers have been treated as somewhat of an exception (as was done in Schein's original study), the current study contributes to normalizing entrepreneurial careers, with 75% of the sample representing a spectrum of entrepreneurial careers. This is achieved by investigating beyond the founding moment into years and decades of reliance on specific career anchors. As a result, this article concludes that most entrepreneurial careers benefit from more than one anchor, often in a dyad form, which includes either a Creativity or an Entrepreneurship anchor together with either a Team leadership (part of General management anchor) or Challenge anchor.

A final implication from the study is to stress the development of education and training that helps individuals ground their work experience with their self-concept. Such emphasis would prioritize a behavioral perspective, connecting to feeling more confident and competent, rather than merely inspiring them to express entrepreneurial intent and self-efficacy to found a firm. Future work could then explore a broader spectrum of individuals, beyond the specialized sample of this study, and investigate not only two, but three or more anchor combinations.

Ethical statement

The human participants took part in interviews. Each individual provided their consent to the interview and was also provided with a transcript or recording of their interview. All participants agreed upon their contributions being utilized for the purpose of the study. All interviews were anonymized.

Notes

1. Emphasis added.
2. Both batches share the following: (1) They targeted the same cohorts of graduates with the second data collection reaching out to candidates that was considered in the first data collection. (2) Both data collections have a similar distribution of gender, age and spread of work experiences. (3) The interview protocol was largely the same with small evolution of inquiries rather than replacements.

References

Aadland, T., Hägg, G., Lundqvist, M.A., Stockhaus, M. and Williams-Middleton, K. (2024), "Mitigating the lack of prior entrepreneurial experience and exposure through entrepreneurship education programs", *International Journal of Entrepreneurial Behavior and Research*, Vol. 30 No. 11, pp. 19-44.

Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

Aldrich, H.E. and Yang, T. (2014), "How do entrepreneurs know what to do? Learning and organizing in new ventures", *Journal of Evolutionary Economics*, Vol. 24 No. 1, pp. 59-82.

Alsos, G., Hägg, G., Lundqvist, M., Politis, D., Stockhaus, M., Williams-Middleton, K. and Djupdal, K. (2023), "Graduates of venture creation programs – where do they apply their entrepreneurial competencies?", *Small Business Economics*, Vol. 60 No. 1, pp. 133-155.

Arthur, M.B., Hall, D.T. and Lawrence, B.S. (1989), "Generating new directions in career theory: the case for a transdisciplinary approach", in Arthur, M.B., Hall, D.T. and Lawrence, B.S. (Eds), *Handbook of Career Theory*, Cambridge University Press, New York, USA, pp. 7-25.

Bird, B. (1988), "Implementing entrepreneurial ideas: the case for intention", *Academy of Management Review*, Vol. 13 No. 3, pp. 442-453.

Burton, M.D., Sørensen, J.B. and Dobrev, S.D. (2016), "A careers perspective on entrepreneurship", *Entrepreneurship Theory and Practice*, Vol. 40 No. 2, pp. 237-247.

Burton, M.D., Fairlie, R.W. and Siegel, D. (2019), "Introduction to a special issue on entrepreneurship and employment: connecting labor market institutions, corporate demography, and human resource management practices", *ILR Review*, Vol. 72 No. 5, pp. 1050-1064.

Clark, D.R., Pidduck, R.J., Lumpkin, G.T. and Covin, J.G. (2024), "Is it okay to study entrepreneurial orientation (EO) at the individual level? Yes!", *Entrepreneurship Theory and Practice*, Vol. 48 No. 1, pp. 349-391.

Danziger, N. and Valency, R. (2006), "Career anchors: distribution and impact on job satisfaction, the Israeli case", *Career Development International*, Vol. 11 No. 4, pp. 293-303.

Danziger, N., Rachman-Moore, D. and Valency, R. (2008), "The construct validity of Schein's career anchors orientation inventory", *Career Development International*, Vol. 13 No. 1, pp. 7-19.

de Bruin, A. and Lewis, K. (2004), "Toward enriching united career theory: familial entrepreneurship and copreneurship", *Career Development International*, Vol. 9 No. 7, pp. 638-646.

Defillippi, R.J. and Arthur, M.B. (1994), "The boundaryless career: a competency-based perspective", *Journal of Organizational Behavior*, Vol. 15 No. 4, pp. 307-324.

Dlouhy, K. and Biemann, T. (2018), "Path dependence in occupational careers: understanding occupational mobility development throughout individuals' careers", *Journal of Vocational Behavior*, Vol. 104, pp. 86-97.

Duval-Couetil, N. and Long, Z. (2014), "Career impacts of entrepreneurship education: how and when students intend to utilize entrepreneurship in their professional lives", *Journal of Business and Entrepreneurship*, Vol. 26 No. 1, pp. 63-87.

Eesley, C.E. and Lee, Y.S. (2021), "Do university entrepreneurship programs promote entrepreneurship?", *Strategic Management Journal*, Vol. 42 No. 4, pp. 833-861.

Feldman, D.C. and Bolino, M.C. (1996), "Careers within careers: reconceptualizing the nature of career anchors and their consequences", *Human Resource Management Review*, Vol. 6 No. 2, pp. 89-112.

Fisher, G. and Aguinis, H. (2017), "Using theory elaboration to make theoretical advancements", *Organizational Research Methods*, Vol. 20 No. 3, pp. 438-464.

Hall, D.T. (1996), "Protean careers of the 21st century", *Academy of Management Perspectives*, Vol. 10 No. 4, pp. 8-16.

Hegde, D. and Tumlinson, J. (2021), "Information frictions and entrepreneurship", *Strategic Management Journal*, Vol. 42 No. 3, pp. 491-528.

Hisrich, R.D., Peters, M.P. and Shepherd, D.A. (2005), *Entrepreneurship*, McGraw Hill, New York.

Hisrich, R.D., Peters, M.P. and Shepherd, D.A. (2017), *Entrepreneurship*, McGraw-Hill Education, New York, NY.

Kao, J. (1989), *Entrepreneurship, Creativity and Organization: Text, Cases, and Readings*, Prentice-Hall, Englewood Cliffs, NJ.

Lackéus, M. and Williams-Middleton, K. (2015), "Venture creation programs: bridging entrepreneurship education and technology transfer", *Education and Training*, Vol. 57 No. 1, pp. 48-73.

Lortie, J. and Castogiovanni, G. (2015), "The theory of planned behavior in entrepreneurship research: what we know and future directions", *International Entrepreneurship and Management Journal*, Vol. 11, pp. 935-957.

Lundqvist, M., Williams-Middleton, K. and Nowell, P. (2015), "Entrepreneurial identity and role expectations in nascent entrepreneurship", *Industry and Higher Education*, Vol. 29 No. 5, pp. 327-344.

Marshall, V. and Bonner, D. (2003), "Career anchors and the effects of downsizing: implications for generations and cultures at work. A preliminary investigation", *Journal of European Industrial Training*, Vol. 27 No. 6, pp. 281-291.

Marshall, D.R. and Gigliotti, R. (2020), "Bound for entrepreneurship? A career-theoretical perspective on entrepreneurial intentions", *International Entrepreneurship and Management Journal*, Vol. 16 No. 1, pp. 287-303.

Nordvik, H. (1991), "Work activity and career goals in Holland's and Schein's theories of vocational personalities and career anchors", *Journal of Vocational Behavior*, Vol. 38 No. 2, pp. 165-178.

Prince, S., Chapman, S. and Cassey, P. (2021), "The definition of entrepreneurship: is it less complex than we think?", *International Journal of Entrepreneurial Behavior and Research*, Vol. 27 No. 9, pp. 26-47.

Rodrigues, R., Guest, D. and Budjanovcanin, A. (2013), "From anchors to orientations: towards a contemporary theory of career preferences", *Journal of Vocational Behavior*, Vol. 83 No. 2, pp. 142-152.

Rosso, B.D. (2014), "Creativity and constraints: exploring the role of constraints in the creative processes of research and development teams", *Organization Studies*, Vol. 35 No. 4, pp. 551-585.

Rusko, R., Hietanen, L., Kohtakangas, K. and Järvi, T. (2019), "Roles of career anchors and path dependency in the entrepreneurial process: case Finland", *International Journal of Entrepreneurship and Small Business*, Vol. 37 No. 3, pp. 342-363.

Schein, E.H. (1985), *Career Anchors*, University Associates, San Diego, CA.

Schein, E.H. (1990), *Career Anchors and Job/Role Planning: the Links Between Career Pathing and Career Development*, MIT, Cambridge, MA, pp. 1-21.

Schein, E. H. (1995), "Commentary: what is an entrepreneur?", *Entrepreneurship Theory and Practice*, Vol. 19 No. 2, pp. 87-88, doi: 10.1177/104225879501900206.

Schein, E.H. (1996), "Career anchors revisited: implications for career development in the 21st century", *Academy of Management Perspectives*, Vol. 10 No. 4, pp. 80-88.

Schein, E.H., Van Maanen, J. and Schein, P.A. (2023), *Career Anchors Reimagined: Finding Direction and Opportunity in the Changing World of Work*, John Wiley & Sons.

Sorgner, A. and Fritsch, M. (2018), "Entrepreneurial career paths: occupational context and the propensity to become self-employed", *Small Business Economics*, Vol. 51, pp. 129-152.

Sugiyama, K., Ladge, J.J. and Dokko, G. (2024), "Stable anchors and dynamic evolution: a paradox theory of career identity maintenance and change", *Academy of Management Review*, Vol. 49 No. 1, pp. 135-154.

Thorgren, S. and Williams, T.A. (2023), "Progress without a venture? Individual benefits of post-disruption entrepreneuring", *Journal of Business Venturing*, Vol. 38 No. 3, pp. 1-21.

Vergne, J.-P. and Durand, R. (2010), "The missing link between the theory and empirics of path dependence: conceptual clarification, testability issue, and methodological implications", *Journal of Management Studies*, Vol. 47 No. 4, pp. 736-759.

Williams-Middleton, K. and Donnellon, A. (2017), "Learning to become entrepreneurial/fostering entrepreneurial identity and habits", in Duening, T.N. and Metzger, M.L. (Eds), *Entrepreneurial Identity: the Process of Becoming an Entrepreneur*, Edward Elgar, Cheltenham, UK, pp. 103-126.

Zhao, W.G.W., Liu, X. and Zhang, H. (2021), "Family embeddedness and medical students' interest for entrepreneurship as an alternative career choice: evidence from China", *Frontiers in Psychology*, Vol. 11, pp. 1-11.

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