Career stages in management studies: a systematic review of scientific production from 2011 to 2020

Nágila Giovanna Silva Vilela and Tania Casado
FEA-USP, Universidade de São Paulo, São Paulo, Brazil

Abstract

Purpose – The purpose of this article is to present a systematic review of scientific production on career stages in the last decade (2011–2020). More specifically, it seeks to understand the methodological approaches, how career stages have been operationalized in research in the Management field, and the main results of these researches.

Design/methodology/approach – The authors searched articles about career stages on the Web of Science database published between 2011 and 2020. The final portfolio for the systematic review included 20 articles based on pre-established criteria for the selection.

Findings – The results present an overview of these articles, as well as the methodological approaches used. The authors confirmed that there is no consensus on the operationalization of the career stage. Five topics associated with career stages were discussed: workers' attitudes and behaviors; training and mentoring; intentions; perception of success and work-life balance; and work values.

Originality/value – The authors found no other studies concerning the review of scientific production on career stages and divergences in the operationalization of the theme. However, considering the large number of research studies that deal with careers and their stages, it is relevant to discuss how the career stages can be operationalized and whether their operationalization is valid.

Keywords Careers, Career stages, Systematic review, Scientific production

Paper type Literature review

Introduction

The theory of career stages has been used to explain the behavioral changes of workers throughout their professional life (Douglas & Swartz, 2016). Organizational psychologists claim the possibility that the stage in which the individual is in the career may influence their work experiences (Lopez & Ramos, 2016), that is, in different stages, workers have different needs, attitudes, values, and concerns (Douglas & Swartz, 2016; Kooij & Boon, 2018; Dutta, Mishra & Varma, 2019), mainly because “[... ]individuals change as they age and accumulate experiences in their professional and non-professional lives” (Adler & Aranya, 1984, p. 46).

According to Lee (2020), differences in career stage appear more significantly in some factors of work than in others (for example: in the author’s research, turnover intentions were different concerning career stage, but the determinants of job satisfaction were similar at different stages). While younger workers at the beginning of their careers may prefer to receive immediate benefits from the organization, such as health plans and maternity and
paternity leave, those at more advanced stages of their careers may attach greater importance to actions related to retirement plans (Mehta, Anderson & Dubinsky, 2000). For this reason, researchers have investigated the importance attributed to several factors of work depending on the stage in which the individual is in the career (Lee, 2020).

That said, the purpose of this article is to present a systematic review of scientific production on career stages in the last decade (2011–2020). More specifically, it seeks to understand the methodological approaches, how career stages have been operationalized in research in the Management field, and the main results of these researches. In order to achieve the objective, we searched articles on the theme on the Web of Science (WoS) database.

It is noteworthy that no systematic reviews of career stages in Management studies were found in the Web of Science, Scielo, or Spell databases. For example, in the search for the terms “systematic review” and “career stage” on Web of Science, not even an article in the Management area was found. When the filter was changed from “career stage” to “career,” a single match appeared on organizational career management practices and objective career success (Bagdadi & Gianecchini, 2019). A similar situation occurred in the Scielo database, in which the only result returned came from the “career” and “systematic review” filters. Although the article is in Applied Social Sciences, it was published in a specific education journal and addresses questions about teacher identity in Physical Education (Pires, do Nascimento, Farias & Suzuki, 2017). Finally, in Spell, no systematic review articles on careers were found.

The motivation for the development of this article arises from the concern for a greater understanding of career stages, how they have been operationalized, and the results of researches dealing with career stages in Management studies. The present study contributes to the career literature by gathering articles that deal with career stages and their relationship with aspects of work. In addition, the general analysis of a field of studies is essential to recognize the limitations and possibilities of future research, especially when there are different ways of operationalizing a variable, such as career stage.

**Theoretical foundation**

Inkson, Gunz, Ganesh and Roper (2012, p. 324) point out that the relationships between individuals and their work can be represented by the notion of a career, which “[. . .] uniquely connects individuals with organizations and other social institutions over time.” The definition of a career is that of Arthur, Hall and Lawrence (1989, p. 8), as “[. . .] the unfolding sequence of a person’s work experiences over time.”

Thus, if career involves an individual’s work experiences (Arthur et al., 1989), the career stages point out the needs, attitudes, values, and concerns (Douglas & Swartz, 2016; Kooij & Boon, 2018; Dutta et al., 2019) of this individual at certain stages of their career. Nagy, Froidevaux and Hirschi (2019) emphasize that the needs of workers change over time and are associated with different contextual factors, which reveals the importance of understanding how changes occur throughout the career stages.

Career stages have already been researched and related to various constructs in various professional occupations (Douglas & Swartz, 2016). Differences in career stages have been studied, for example, in relation to job satisfaction, commitment, motivation, worker involvement, salary, work complexity, work burnout, performance, personal growth, turnover intention, gender, worker behaviors and attitudes, among others (Gould, 1979; Aryee, Chay & Chew, 1994; Kooij, Lange, Jansen & Dikkers, 2008; James, McKeeachie & Swanberg, 2011; Lopez & Ramos, 2016; Duarte & Lopes, 2018; Salmela-Aro & Upadyaya, 2018; Kooij & Boon, 2018; Lee, 2020; Hommelhoff, Schröder & Niessen, 2020; Rehbock, Knipfer & Peus, 2021).

There are several approaches to distinguish and explain an individual’s career stages (Dutta et al., 2019); however, according to Ornstein, Cron and Slocum (1989), the theoretical
model that serves as the basis for a significant part of career development studies is that proposed by Donald Super. Super was a pioneer in defining terms that demonstrate the cyclical nature of a career (Lunsford, Baker & Pifer, 2018). In 1976, Super proposed the Life-Career Rainbow to describe aspects of the career through the life span (Super, 1980). Later, in 1980, the approach was adapted to Life-Span, Life-Space Theory (Super, 1980). Super’s model proposes that the individual develops five career stages, even though such stages are not covered in a sequential manner (McCormick & Barnett, 2008; Rafiq, 2019). The stages are:

1. Growth stage: occurs between 0 and 14 years. The individual “[…] starts the cycle becoming aware of an imminent career decision” (Super, 1980, p. 293);

2. Exploration stage: occurs between 15 and 25 years of age. The individual explores his main competencies, aptitudes, and activities with more affinity (McCormick & Barnett, 2008; Hess & Jepsen, 2009). At this stage, the worker seeks to have mastery over his tasks and strives to obtain the approval of co-workers and the organization as a whole (Aryee et al., 1994);

3. Establishment stage: occurs between 25 and 44 years. At this stage, the individual identifies with his career (McCormick & Barnett, 2008) and has a certain degree of independence and competence (Aryee et al., 1994). The search for development, specialization, and training stems from the effort to guarantee a career position (Gould, 1979; Aryee et al., 1994; McCormick & Barnett, 2008). Therefore, the main interests at this stage are to obtain a secure job and consolidate the choice of career (Cairo, Kritis & Myers, 1996; Hess & Jepsen, 2009);

4. Maintenance stage: occurs between 45 and 64 years. The individual is more concerned with maintaining what they have already achieved in his career than his growth (Gould, 1979; McCormick & Barnett, 2008; Hess & Jepsen, 2009). Therefore, the need to be promoted decreases (Aryee et al., 1994), while the need to maintain status and position in the organization increases (Cairo et al., 1996);

5. Disengagement stage: occurs from the age of 65. Also called decline, disengagement occurs when the individual seeks to end his career and start a new phase in life (McCormick & Barnett, 2008). This new phase is usually associated with the transition from active employment to retirement (Cairo et al., 1996; McCormick & Barnett, 2008).

Despite the definition of five stages, many studies (e.g. Cron & Slocum, 1986; Aryee et al., 1994; McCormick & Barnett, 2008; Lassance & Sarriera, 2012) do not mention the growth stage, as they focus on adult career development.

In addition to the model proposed by Super (1980), different ways of operationalizing career stages are employed in scientific research. In general, career stages can be analyzed using three main approaches: (1) regarding the individual’s age; (2) in terms of organization tenure; and (3) in terms of job tenure (Bedeian, Pizzolatto, Long & Griffeth, 1991).

The first perspective presents career stages based on life stages or age groups (Gould, 1979; Bedeian et al., 1991), that is, the individual’s chronological age. Bedeian et al. (1991, p. 155) affirm that “[…] age, or more commonly the experiences of professional life, shape occupational aspirations and concerns and, therefore, it is a factor that identifies career stages.” In contrast, Kooiji et al. (2008) argue that individuals of the same age may be at different career stages. Thus, the relationship between chronological age and career stage, according to Huberman (2000), is neither complete nor homogeneous. Similarly, advanced professional training, for example, can “delay” entry into a career and, therefore, contribute to career stages occurring later (Gould, 1979). Thus, individuals of the same age may be at
different career stages (Aryee et al., 1994). It is also noteworthy that the differences between age groups can be associated not only with the career stage but also with generational differences (Dutta et al., 2019).

The second approach, called organization tenure, concerns the individual’s suitability and growth in an organization (Gould, 1979). In this perspective, career stages are measured according to a person’s time as a member of a specific organization (Gould, 1979). Bedeian et al. (1991) suggest that career progression occurs according to the individual’s time in the organization.

The third and final approach is associated with a specific position or assignment (Bedeian et al., 1991). In this case, the time an individual occupies a specific position or performs a particular task (as a salesman, driver, teacher, among others) is used to analyze the various stages that the individual may experience (Bedeian et al., 1991).

Morrow and McElroy (1987) realized, using the three different approaches to operationalize the career stages, that each perspective produces different results. Therefore, it is notorious the difficulty present in career studies in comparing the results of several surveys since each uses a different instrument for measurement (Bedeian et al., 1991). This inconsistency in measurement can be considered a limiting factor in the applicability of career stages (Hess & Jepsen, 2009). However, despite difficulties and criticisms, stages can still assume important aspects in individuals’ professional lives (Duarte & Lopes, 2018).

**Methodological procedures**

This qualitative and descriptive study uses systematic review as a research strategy to present an overview of scientific production on career stages in the last decade (2011–2020). Based on systematic reviews, it is possible to synthesize the results of relevant studies on a given theme (Cook, Mulrow & Haynes, 1997). Since this type of research must allow its replication, it must follow strict criteria for selecting articles (Tranfield, Denyer & Smart, 2003). In this research, we use the steps proposed by Galvão, Sawada and Trevizan (2004).

Initially, it is necessary to define the systematic review question that will guide the work, being, therefore, the most important stage of the whole process (Galvão et al., 2004). The question to be answered here is: “What are the methodological approaches and main results of researches that have investigated career stages in the last decade?”

Then, it is necessary to search, select and critically evaluate the studies that will be part of the portfolio for the review (Galvão et al., 2004). In order to select articles for systematic review, the term “career stage” was searched on the Web of Science (WoS) database in January 2021. The choice for WoS was because this database includes the journals with the most remarkable scientific impact in the Management area. Here, we did not seek to exhaust all articles on career stages but rather to analyze those with the greatest impact in recent years, which also explains the stipulated period (2011–2020). The criteria used for search were: the term was applied to “topic”, which covers title, abstract, author’s keywords, and keywords inserted by the database itself; the period determined was from 2011 to 2020; the type of document was restricted to “article”; the research areas investigated were “Management” and “Business.” The research was restricted to the Management and Business areas as the focus is on understanding how researchers in the Management field have investigated and operationalized career stages. The details of this search are presented in Table 1. Following these criteria, we found 59 articles.

These 59 articles made up the preliminary research portfolio. Thirteen articles were immediately excluded because: (1) the term “career stage” appeared as keywords assigned by WoS, but the title and abstract did not indicate a relationship with the theme; (2) the article was only theoretical (therefore, it was not relevant, since one of the intentions here is to
understand how career stages have been operationalized in the Management research area; or (3) the article was clearly not associated with career stages. An example of the latter is Rao, Iyengar and Goldsby (2013), whose focus involved the traditional measures of the impact of the research, but the summary presented that such measures harm those at the beginning of their careers. There was no operationalization of the construct, therefore, the article was excluded from the portfolio.

The remaining 46 articles were analyzed in greater depth. At this stage, two articles (both from Indian journals) were excluded because they were not available for download, whereas other 24 were removed from the final portfolio because they either did not demonstrate how the career stages were operationalized, or focused on the stages of life (and not the career). In the end, 20 articles made up the systematic review portfolio. After selecting the articles, the data was synthesized. Then, the reading of the selected articles was carried out in full. Initially, a spreadsheet was created and filled in with the following information: title, keywords, article objective, methodology, and form of operationalization of career stages. The word cloud with the keywords of the articles was created on the website WordArt.com. Then, the main results of the articles were summarized in a document in order to observe whether there were relationships between these results, which generated five main topics of discussion: workers’ attitudes and behaviors; training and mentoring; intentions; perception of success; and work-life balance and work values.

Results and discussions

The 20 articles selected for review have been published mainly in the last five years: three in 2020, three in 2019, four in 2018, two in 2017, and three in 2016. It is noteworthy that in the last decade, only in 2014 there was no article selected for this research portfolio.

These articles were published in different journals, most of which focused on the field of human resources (HR) or careers. Human Relations is the journal with the most significant number (four) of articles published in the last decade on career stages. Career Development International published two of the 20 articles selected for review, whereas the remaining journals had only one article published on the subject in the reference period.

The objects of study in these articles, that is, the subjects investigated, include academic professors, university employees, financial consultants, drivers, Generation Y individuals (called millennials), MBA alumni, lawyers, businesswomen, civil servants, and workers from various sectors such as information technology (IT), health, media, direct sales. Among the surveys that indicate where the studies were carried out, it is possible to mention: United States (3 articles), Canada (2 articles), Netherlands (2 articles), European countries (2 articles, no country identification), India (1 article), Ireland (1 article), China (1 article), Portugal (1 article), Lithuania (1 article), South Africa (1 article) and Singapore (1 article). In four articles, there is no identification of where the research was carried out.

| Criteria                        | Web of science                  | No. of articles |
|---------------------------------|---------------------------------|-----------------|
| Term: “career stage”            | Topic (title, abstract, keywords)| 530             |
| Applied to                      | Period                           | 402             |
| Period                          | Type of document                 | 350             |
| Type of document                | Research/subject areas           | 59              |
| Research/subject areas          | Language                         | 59              |
| Language                        | Total                            | 59              |

Table 1.
Criteria used for the initial selection of articles

Source(s): The authors (2021)
Figure 1 shows the keywords of the selected articles. Some words stand out, such as career stage, careers, jobs, work-life balance, and diversity. Of the 20 articles selected for the systematic review, only the works by James et al. (2011), Davis and Shaver (2012), and de Villiers Scheepers, Boshoff and Oostenbrink (2017) did not contain keywords.

As for the type of study, all articles selected are empirical. The predominant research approach is quantitative research (15 articles), followed by qualitative research (4 articles) and the mixed methods approach (1 article). Seventeen articles used primary data, whereas three used secondary data, namely: US Panel Study of Entrepreneurial Dynamics I and II (Davis & Shaver, 2012), European Social Survey (Duarte & Lopes, 2018), and data from 142 law firms and the 2,994 lawyers who work for them (Lander, van Oosterhout, Heugens & Pruijs, 2018).

Eighteen articles used a cross-section, that is, the research was carried out in a single moment, whereas the other two carried out the research in phases or measurement waves. Dutta et al. (2019), authors of the only research with a mixed approach, operationalized the research in two phases: initially, data were collected from employees of IT companies; then, IT professionals and HR professionals were interviewed for a better interpretation of the findings in the quantitative phase. Kooij and Boon (2018) collected the survey data with employees of a Dutch university in three waves: initially, the online questionnaire was sent to 3,812 university employees, from which 1,429 returned it. In a second step, a year later, a new questionnaire was sent to the employees who answered the first questionnaire, and 765 completed it. Finally, in the third wave, one year after the second, the third questionnaire was sent to 765 employees, and 487 responded to it.

Four studies (the only qualitative ones) collected data from less than 100 observations – in this case, interviews were conducted with mentoring partners, freelancers, government employees, and academics; nine articles evaluated between 100 and 1,000 observations; and seven articles used a sample with more than 1,000 observations, three of which used secondary data.

Out of the articles that used primary data, all the qualitative (4) collected them through interviews, whereas all the quantitative (12) used the questionnaire. One article (mixed methods) used a questionnaire and interview for data collection, and the other three used secondary data.

As for data analysis techniques, the following stood out in quantitative research: descriptive statistics, correlation, discriminant analysis, Poisson multilevel regression, confirmatory factor analysis, and structural equation modeling. As for qualitative research, the techniques used for data analysis included interpretative phenomenological analysis and comparative analysis.

Figure 1. Word cloud of the selected articles keywords

Source(s): The authors (2021)
Having presented the general panorama and the methodological approaches of the selected researches, it is worth highlighting how the variable “career stage” was operationalized in these articles. As presented in the theoretical framework, there are different approaches to distinguish and explain the stages of an individual’s career, which contributes to making the comparison of the results of several researches more complex (Bedeian et al., 1991; Hess & Jepsen, 2009; Dutta et al., 2019). Despite this, career stages can still assume important aspects in individuals’ professional lives (Duarte & Lopes, 2018).

In nine articles, career stages were operationalized according to the worker’s chronological age. The proposals of stages together with the sample used are presented in Table 2.

It is possible to observe in Table 2 that the operationalization of career stages in the article by Dutta et al. (2019) is the closest to Super’s model (1980). Despite this, the authors used different age intervals and did not include the first and last stages Super (1980) proposed: growth and disengagement.

In spite of the wide use of chronological age for operationalizing career stages, Aryee et al. (1994) and Kooij et al. (2008) argue that individuals of the same age may be at different career stages. Advanced professional training, for example, can “delay” entry into a career and,

### Table 2.
Career stages according to the individual’s age

| Authors          | Sample                                                                 | Career stages                                                                 |
|------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Post et al. (2013) | 441 Alumni from the MBA programs – US                                  | Late career: received their MBA 30 years prior to the survey and age 50–78  |
|                  |                                                                        | Mid-career: received their MBA 15 years prior to the survey and age 36–49    |
| Santos (2016)    | 87 Academics – Portugal                                                | Initial years of the career: age 25–40                                       |
| de Villiers      | Early career: up to 30                                                 | Mid-to-late career: age 41–65                                               |
| Scheepers et al. | Mid-career: age 31–45                                                 | Late career: age 46+                                                        |
| Dutta et al. (2019)| 1,127 Professionals in the IT/ITeS industry – India                  | Exploration stage: up to 30                                                 |
|                  | Establishment stage: age 30–45                                        | Maintenance stage: age 45+                                                  |
| Gostautaité et al.| 566 Healthcare professionals – Lithuania                              | Early-career: below the mean age: 30                                       |
| (2020)           | Middle-career: mean age: 44                                            | Late-career: above the mean age: 57                                        |
| Davis e Shaver   | Anticipatory stage: age 18–29                                          | Launching: age 30–39                                                       |
| (2012)           | Establishing: age 40–49                                                | Shifting gears: age 50+                                                     |
| Darcy et al. (2012)| 729 Employees of public and private organizations – Republic of Ireland | Early career: age 18–29                                                    |
|                  | Developing career: age 30–39                                           | Consolidating career: age 40–49                                             |
|                  | Trial stage: age 15–29                                                 | Pre-retirement career: age 50+                                              |
| Duarte e Lopes    | 6,047 Employees – US                                                   | Establishment stage: age 30–39                                              |
| (2018)           | Secondary data from European Social Survey (27,035 respondents) – 23 European countries | Maintenance stage: age 40–49                                                |
| James et al. (2011) | 6,047 Employees – US                                                   | Decline stage: age 50+                                                     |
|                  | Emerging adults: age 18–24                                             | Responding to opportunity: age 25–39                                        |
|                  | Settling in adults: age 25–39                                          | Approaching retirement: age 55–65                                           |
|                  | Prime working years: age 40–54                                         | Retirement eligible: age 66+                                               |

Source(s): The authors (2021)
therefore, contribute to career stages occurring later (Gould, 1979). To reduce this limitation, Goštautaitė, Bučiūnienė, Dalla Rosa, Duffy and Kim (2020) analyzed whether chronological age is a valid indicator for the career stage, which may be interesting for future research as well. In addition to collecting the respondents’ chronological age (in years), the authors also obtained data on professional experience and working time in the organization. The high correlation between chronological age and time of professional and work experience in the organization indicated that age was a valid indicator for operationalizing career stages for the surveyed sample.

Douglas and Swartz (2016), Pousa, Mathieu and Trépanier (2017), Nowlin, Walker, Deeter-Schmelz and Haas (2018) and Alacovska, Fieseler and Wong (2021) describe career stages according to the length of professional experience, as shown in Table 3.

The operationalization of career stages used by Douglas and Swartz (2016) and Pousa et al. (2017) was based on surveys that specifically dealt with their research objects, namely truck drivers (McElroy, Rodriguez, Griffin, Morrow & Wilson, 1993), and salesperson and sales managers (Flaherty & Pappas, 2002; Mehta, Anderson, Dubas, Dubinsky & Liu, 1999). On the other hand, Nowlin et al. (2018) and Alacovska et al. (2021) do not indicate the reference used for the definition according to job tenure, and the former do not even suggest a nomenclature for the intervals of years.

Kooij and Boon (2018) and Rafiq (2019), in turn, operationalized the career stage according to the time individuals worked in the organization. The choice for this form of operationalization was based on different authors in the two studies, but there is a common reference Gould and Hawkins (1978). The research by Kooij and Boon (2018) was carried out with employees of a Dutch university, while Rafiq (2019) investigated employees of a Chinese media organization. The authors defined career stages in the same way: (1) initial

| Authors             | Sample                                                                 | Career stages                                                                 |
|---------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------|
| Douglas and Swartz (2016) | 329 Truck Drivers                                                      | Early career: fewer than 2 years of professional driving experience          |
|                     |                                                                        | Mid-career: 2–10 years of experience                                         |
| Pousa et al. (2017)  | 318 Financial advisors – Canada                                        | Late career: more than 10 years of experience                                |
|                     |                                                                        | Early stage: 1–7 years of selling experience                                |
|                     |                                                                        | Middle stage: 8–15 years of selling experience                               |
|                     |                                                                        | Late stage: more than 15 years of selling experience                         |
| Nowlin et al. (2018)| 611 Attendees                                                          | There was no appointment of the stages, but they were divided                |
|                     |                                                                        | Less than one year of experience (working in sales)                         |
| Alacovska et al. (2021)| 31 Interviews with creative workers, such as fashion designer, musician, performing artist – sudeste da Europa | Early-career stage: fewer than 10 years into their creative careers          |
|                     |                                                                        | Mid-career stage: 10–15 years into their creative careers                   |

**Source(s):** The authors (2021)
stage or establishment stage: less than two years in the organization; (2) intermediate or advance stage: two to ten years in the organization; (3) final stage or maintenance stage: more than ten years in the organization.

Low, Bordia and Bordia (2016) and Lander et al. (2018) operationalized career stages in two ways. Low et al. (2016) research is qualitative and carried out with government officials from Singapore. Each participant was asked to choose a career stage that best described their current situation according to the models of Super (1980) and Dalton, Thompson and Price (1977). As presented in the theoretical foundation, the stage proposed by Super (1980) includes exploration, establishment, maintenance, and disengagement. The model by Dalton et al. (1977) refers to the tasks and responsibilities that workers assume at different stages of their careers: apprentice stage (the work done is simple and routine), colleague stage (work is done independently), mentor stage (in addition to performing their own work, also transmits knowledge to colleagues), and sponsor stage (has significant influence in the organization).

Using secondary data from law firms and lawyers, Lander et al. (2018) classified career stages through professional experience and working time in the office. According to the authors, stages can be defined as follows: (1) intern: less than two years of professional experience; (2) junior lawyer: two to four years in the organization and professional experience of a maximum of five years; (3) senior lawyer: four to eight years in the organization and professional experience of a maximum of nine years; and (4) tenured lawyer: more than eight years in the organization.

Kuron, Lyons, Schweitzer and Ng (2015), in research with Canadian Millenials, considered only two career stages: pre-career and working. Pre-career individuals are probably in Super’s (1980) exploration stage. These individuals are in higher education, which means they have already made educational choices that somewhat restrict future career options. The individuals at the working stage are probably in Super’s (1980) establishment phase. As already presented, at this stage, the individual identifies with his career (McCormick & Barnett, 2008) and has a degree of independence and competence (Aryee et al., 1994). The search for development, specialization and training stems from the effort to guarantee a career position (Gould, 1979; Aryee et al., 1994; McCormick & Barnett, 2008).

Finally, we highlight the operationalization of the career stages in the studies by Kraimer, Greco, Seibert and Sargent (2019) and Ghosh, Hutchins, Rose and Manongsong (2020). Both researches aimed at teachers/academics: members of the Academy of Management and professors who participated in formal mentoring programs, respectively. The career stages proposed by Kraimer et al. (2019) involve early career stage (assistant professor), mid-career (associate professor), and final career stage (full professor). Similarly, Ghosh et al. (2020) named junior faculty those with the title of Assistant Professor and senior faculty those with the title of Associate or Full Professor.

The main results of our analysis of the 20 selected articles are outlined below, presenting the operationalization of career stages. These results were divided into five main topics that address the following themes at different career stages: workers’ attitudes and behaviors; training and mentoring; intentions; perception of success; and work-life balance and work values.

Workers’ attitudes and behaviors at different career stages

The research carried out by James et al. (2011) with workers in the United States revealed that older workers are more engaged than younger workers. This result may be associated with the fact that these workers have different expectations about the job and believe that they will be rewarded for their loyalty to the organization (James et al., 2011). Also, supervisors who show concern for the well-being of employees can expect rewards through reciprocal actions by workers at all stages of their careers (James et al., 2011).

Douglas and Swartz (2016) noticed that the greater the professional experience of the shipping company’s drivers, the more negative will be their attitudes towards safety and
compliance regulations. This result is associated with the fact that drivers in the early career stage (less than two years of professional experience) are looking to establish themselves in their careers, in addition to having recently received training on safety regulations. Drivers in the intermediate stage of their careers (two to ten years of professional experience), in turn, probably chose this profession and still have the motivation to enforce safety regulations. However, workers at the end of their career have different perceptions about the effectiveness of safety regulations, and therefore have negative attitudes towards such regulations. These results highlight the need for transportation managers to adapt safety training to all career stages instead of offering such training only to workers in early stages (Douglas & Swartz, 2016).

Similar to the results of the research by Douglas and Swartz (2016) that point out more negative attitudes of workers in later career stages, Lander et al. (2018) found that senior lawyers are more likely to engage in professional misconduct than junior lawyers. This result may be associated with the fact that senior lawyers have different roles in the law firm, in addition to the responsibility to keep in touch with clients (Lander et al., 2018).

When it comes to intrinsic and extrinsic motivation, the research results of Duarte and Lopes (2018) with secondary data from 27,035 respondents reveal that career stages do not determine intrinsic motivations per se, but predict extrinsic motivations. For example, professionals with more qualified occupations and in the early stages of their careers were more satisfied with their work and more willing to learn when compared to those who were in less qualified occupations. Workers in later career stages, on the other hand, valued extrinsic aspects (recognition) and were more satisfied with their work than those who were in the early stages of their career (Duarte & Lopes, 2018).

Rafiq (2019), in turn, sought to examine the moderating effect of the career stage on the relationship between incorporation at work and behavior related to innovation. While early-stage workers are more likely to generate ideas when incorporated into their work, late-stage workers are more likely to implement ideas. These results are significant for HR managers who must shape organizational environments that keep workers inserted, as well as provide an environment for generating and implementing ideas (Rafiq, 2019).

Training and mentoring at different career stages

Pousa et al. (2017) sought to understand whether the salesperson’s career stage moderates the relationship between management training and performance. The research results confirmed that training positively affects performance; however, there was no moderating effect on the career stage. In addition, the authors realized that training contributes to performance at all stages of the salesperson’s career. Thus, there was a contradiction in the expectations that new employees have greater benefits from training and that salespeople in the final stages of their careers already have sufficient sales expertise, and therefore training would not alter their results. The conclusion is that managers should invest equally in training workers at all stages of their careers (Pousa et al., 2017).

In their research, Ghosh et al. (2020) interviewed academic professors mentoring partners in a specific program that aimed at reciprocity in formal mentoring relationships. Both primary teachers (assistants) and secondary teachers (associates or full) commented on the challenges experienced. For example, when secondary school teachers played the role of mentor to a senior teacher, they perceived that the latter had nothing to learn from them because of their vast experience. However, senior teachers also reported challenges when mentoring secondary teachers. In this case, the difficulty was the lack of professional experience similar to that of a very young teacher. Finally, the authors mentioned a curiosity: no gender-related challenge was reported among respondents. However, the only mentoring pair in which both participants were women was also the only one not to point out challenges associated with the career stage (Ghosh et al., 2020).
Intentions at different career stages

Among the selected articles, three deal with intentions: growth intentions (Davis & Shaver, 2012), retirement intentions (Post, Schneer, Reitman & Ogilvie, 2013) and job search intentions (Dutta et al., 2019).

Davis and Shaver (2012) investigated the differences in the growth intentions of men and women entrepreneurs. From the analysis of secondary data, the authors identified that men in the anticipatory stage (18 to 29 years of age) are the most likely to have growth intentions, which may be associated with lower levels of family obligations at this stage. Women in the launching (30 to 39 years of age), establishment (40 to 49 years of age), and gear shifting (50 years of age or older) stages have similar growth intentions to men in the same stages. Women mothers have more growth intentions than other women, demonstrating that while men without family obligations have greater growth intentions, women with opposite characteristics (that is, those with family obligations) have similar intentions (Davis & Shaver, 2012).

Retirement intentions were analyzed by Post et al. (2013) through research with MBA alumni. The results revealed that professionals in the intermediate career stage (between 36 and 49 years old) expect to retire three years earlier than professionals in the final career stage (between 50 and 78 years old). The career stage moderated the relationship between income and expected retirement age and between the centrality of work and expected retirement age. On the one hand, the expected retirement age is more sensitive to income for workers in the intermediate career stage. On the other hand, the expected retirement age is more sensitive to the centrality of work in the final stage of the career. These results suggest that retirement decision models should involve not only those eligible for retirement, but also those in the middle stage of their careers (Post et al., 2013).

Finally, job search intentions were studied by Dutta et al. (2019) with IT sector workers in India. The authors mentioned the importance of understanding the factors that influence job search intentions, as understanding workers’ needs can help organizations win better candidates. Career stages moderated the relationship between intention to seek employment and its predictors. They found that the salary, the type of work, and the balance between work and personal life were associated with the intention to seek employment at all career stages. Additionally, ethical citizenship and the fit between person and organization were more important for individuals in the exploration stage (less than 30 years old). Therefore, the relevance of organizations to consider differences in career stages for the formulation of HR policies is notorious (Dutta et al., 2019).

Perception of success at different career stages

The two surveys that dealt with the perception of success analyzed academic professors. While Santos (2016) sought to clarify the barriers in the perception of success with 87 Portuguese academics, Kraimer et al. (2019) sought to understand success from a survey of 1,644 members of the Academy of Management.

Santos (2016) identified three main barriers to success: challenges in relationships between colleagues, lack of organizational support and job insecurity, and career progression expectations. In general, academics at more advanced stages of their career more often perceive the challenges in relationships between colleagues and the rivalry between them. Older women are even more dissatisfied with this situation than men in the same career stage. The precariousness of employment was emphasized by younger teachers and in lower positions. These also pointed to job instability as a barrier to the perception of success. Workers in an advanced career stage, in turn, commented mainly on the lack of support from an administrative team, leaving them overwhelmed with administrative tasks in addition to the teaching activities under their responsibility. Finally, career progression expectations were associated with dissatisfaction with the progression criteria, mainly related to the number of publications.
Kraimer et al. (2019) related career success to aspects such as role overload, work-family conflict, engagement at work, among others. Among the results obtained, the following stand out: (1) the overload of roles was negatively related to engagement at work for academics in the intermediate stage; (2) the overload of roles was positively related to work engagement for academics in the final stage; (3) engagement at work was positively related to career satisfaction in the three stages; (4) the overload of roles was positively related to the salary for academics in the intermediate stage; (5) the overload of roles was negatively related to the salary for academics in the early and late stages of their careers; and (6) positive factors (such as publishing an article or receiving an award) and negative factors (such as not receiving a promotion or receiving a negative performance evaluation) had more effects on engagement, current salary and career satisfaction in the intermediate and final career stages than in the early stage (Kraimer et al., 2019).

Work-life balance and work values at different career stages

The study by Darcy, McCarthy, Hill and Grady (2012) with workers in Ireland suggests that work-life balance is a concern for individuals at all stages of their careers. The authors concluded that the more involved in the job, the less likely the worker is to balance work and life at all stages of the career. Especially the workers in the initial and pre-retirement stages reported the importance of the perception of managerial support. In addition, those at the beginning of their careers are more concerned with the negative impacts of work-life balance policies on their careers. These results demonstrate the importance of organizations creating a work-life culture in which managers offer support to workers without prejudice to the progression of workers in the organization (Darcy et al., 2012).

Finally, Kuron et al. (2015) investigated whether work values vary between different career stages of Canadian Millennials. The results proved that this generation’s work values are relatively stable, regardless of whether they are in the pre-career or working phase. Pre-career workers are mainly attracted to a good working environment with colleagues and socially responsible organizations. Those who are working are mainly concerned with attractive pay. In general, all Millennials will likely be attracted by organizations that offer exciting work, balance between personal and professional life, safety at work, and information necessary to carry out the work (Kuron et al., 2015).

Final considerations

This article aimed to present a systematic review of scientific production on career stages in the last decade (2011–2020). More specifically, it sought to understand the methodological approaches, how career stages have been operationalized in research in the Management field, and the main results of these researches. From the discussion of the 20 selected articles, it was possible to analyze the methodological approaches and the main results of these researches concerning the career stages.

Confirming authors’ notes such as Hess and Jepsen (2009), there is an inconsistency in the operationalization of career stages. We noticed that some researchers such as Post et al. (2013), Santos (2016), and Gostautaitė et al. (2020) used the chronological age; Kooij and Boon (2018) and Rafiq (2019) used the organization tenure; Pousa et al. (2017), Alacovska et al. (2021) and others applied the job tenure; Low et al. (2016) and Lander et al. (2018) used a combination of two of these three ways mentioned. Still, other types of measurement were proposed by researchers such as Kuron et al. (2015), Kraimer et al. (2019) and Ghosh et al. (2020).

From the reflections and analyses, the principal results and contributions of this research are highlighted here:

(1) There is still no consensus on the operationalization of career stages. To deal with this challenge/limitation, researchers can collect data associated with two or more stage
indicators, as proposed by Goštautaitė et al. (2020). Thus, it is possible to determine which one has greater validity based on the correlation between the indicators.

(2) Workers’ attitudes, behaviors and motivations can change throughout their career stages. That is why HR managers must constantly train and develop workers at all stages.

(3) In order to value diversity among workers, organizational leaders must commit to the development of strategies that eliminate barriers associated with gender, race, age (Sabharwal, 2014), among others, including differences in career stages.

(4) The absence of articles published by Brazilian researchers demonstrates that there is still ample possibility of discussing career stages in the country’s Management field. For example, in the initial search for the term on WoS, only four out of the 531 results included authors from Brazil; besides, they focused on the following areas: Education, Public Health, Biology, and Science and Medicine, instead of Management.

The main limitation of this study is related to the number of articles selected for systematic review. Future research may expand the search for other databases, such as CAPES journals, Scopus, and explore research in areas other than Management. We also suggest analyzing the networks of authors, most cited research, and career concepts used. This study also demonstrates that scientific production on career stages has room for discussion, especially when it comes to the forms of operationalization. Therefore, it is suggested that future research propose an operationalization model that involves two or more ways of analyzing career stages to show whether there is a difference in validity. In addition, researches on career stages must address different careers, such as teachers, IT professionals, truck drivers, salespeople, among others. The question remains whether there are more effective ways of operationalizing a career at the expense of others. Thinking specifically about contemporary careers, is the Super (1980) model adequate? These are just some of the questions that can guide further research.

References
Adler, S., & Aranya, N. (1984). A comparison of the work needs, attitudes, and preferences of professional accountants at different career stages. *Journal of Vocational Behavior, 25*(1), 45–57.

Alacovska, A., Fieseler, C., & Wong, S. I. (2021). “Thriving instead of surviving”: A capability approach to geographical career transitions in the creative industries. *Human Relations, 74*(5), 751–780.

Arthur, M. B., Hall, D. T., & Lawrence, B. S. (1989). *Handbook of career theory*. New York: Cambridge University Press.

Aryee, S., Chay, Y. W., & Chew, J. (1994). An investigation of the predictors and outcomes of career commitment in three career stages. *Journal of Vocational Behavior, 44*(1), 1–16.

Bagdadli, S., & Gianecchini, M. (2019). Organizational career management practices and objective career success: A systematic review and framework. *Human Resource Management Review, 29*(3), 353–370.

Bedeian, A. G., Pizzolatto, A. B., Long, R. G., & Griffeth, R. W. (1991). The measurement and conceptualization of career stages. *Journal of Career Development, 17*(3), 153–166.

Cairo, P. C., Kritis, K. J., & Myers, R. M. (1996). Career assessment and the adult career concerns inventory. *Journal of Career Assessment, 4*(2), 189–204.

Cook, D. J., Mulrow, C. D., & Haynes, R. B. (1997). Systematic reviews: Synthesis of best evidence for clinical decisions. *Annals of Internal Medicine, 126*(5), 376–380.

Cron, W. L., & Slocum, J. W., Jr (1986). Career-stages approach to managing the sales force. *Journal of Consumer Marketing, 3*(4), 11–20.
Dalton, G. W., Thompson, P. H., & Price, R. L. (1977). The four stages of professional careers: A new look at performance by professionals. *Organizational Dynamics, 6*(1), 19–42.

Darcy, C., McCarthy, A., Hill, J., & Grady, G. (2012). Work-life balance: One size fits all? An exploratory analysis of the differential effects of career stage. *European Management Journal, 30*(2), 111–120.

Davis, A. E., & Shaver, K. G. (2012). Understanding gendered variations in business growth intentions across the life course. *Entrepreneurship Theory and Practice, 36*(3), 495–512.

de Villiers Scheepers, M. J., Boshoff, C., & Oostenbrink, M. (2017). Entrepreneurial women’s cognitive ambidexterity: Career and cultural influences. *South African Journal of Business Management, 48*(4), 21–33.

Douglas, M. A., & Swartz, S. M. (2016). Career stage and truck drivers’ regulatory attitudes. *The International Journal of Logistics Management, 27*(3), 686–706.

Duarte, H., & Lopes, D. (2018). Career stages and occupations impacts on workers motivations. *International Journal of Manpower, 39*(5), 746–763.

Dutta, D., Mishra, S. K., & Varma, A. (2019). Predictors of job pursuit intention across career stages: A multi-phase investigation. *The International Journal of Human Resource Management, 32*(20), 1–38.

Flaherty, K. E., & Pappas, J. M. (2002). Using career stage theory to predict turnover intentions among salespeople. *Journal of Marketing Theory and Practice, 10*(3), 48–57.

Galvão, C. M., Sawada, N. O., & Trevizan, M. A. (2004). Revisão sistemática: recurso que proporciona a incorporação das evidências na prática da enfermagem. *Revista Latino-Americana de Enfermagem, 12*(3), 549–556.

Ghosh, R., Hutchins, H. M., Rose, K. J., & Manongsong, A. M. (2020). Exploring the lived experiences of mutuality in diverse formal faculty mentoring partnerships through the lens of mentoring schemas. *Human Resource Development Quarterly, 31*(3), 319–340.

Goštautaitė, B., Buciūnienė, I., Dalla Rosa, A., Duffy, R., & Kim, H. J. (2020). Healthcare professionals with calling are less likely to be burned out: The role of social worth and career stage. *Career Development International, 25*(2), 649–670.

Gould, S. (1979). Age, job complexity, satisfaction, and performance. *Journal of Vocational Behavior, 14*(2), 209–223.

Gould, S., & Hawkins, B. L. (1978). Organizational career stage as a moderator of the satisfaction-performance relationship. *Academy of Management Journal, 21*(3), 434–450.

Hess, N., & Jepsen, D. M. (2009). Career stage and generational differences in psychological contracts. *Career Development International, 14*(3), 261–283.

Hommelhoff, S., Schröder, C., & Niessen, C. (2020). The experience of personal growth in different career stages: An exploratory study. *Organisationsberatung, Supervision, Coaching, 27*(1), 5–19.

Huberman, M. (2000). O ciclo de vida profissional dos professores. In A. Nóvoa (Ed.), *Vidas de professores* (pp. 312–61). Porto: Porto Editora.

Inkson, K., Gunz, H., Ganesh, S., & Roper, J. (2012). Boundaryless careers: Bringing back boundaries. *Organization Studies, 33*(3), 323–340.

James, J. B., McKechnie, S., & Swanberg, J. (2011). Predicting employee engagement in an age-diverse retail workforce. *Journal of Organizational Behavior, 32*(2), 173–196.

Kooij, D., & Boon, C. (2018). Perceptions of HR practices, person–organisation fit, and affective commitment: The moderating role of career stage. *Human Resource Management Journal, 28*(1), 61–75.

Kooij, D., Lange, A., Jansen, P., & Dikkers, J. (2008). Older workers’ motivation to continue to work: Five meanings of age: A conceptual review. *Journal of Managerial Psychology, 23*(4), 364–394.

Kraimer, M. L., Greco, L., Seibert, S. E., & Sargent, L. D. (2019). An investigation of academic career success: The new tempo of academic life. *Academy of Management Learning and Education, 18*(2), 128–152.
Kuron, L. K., Lyons, S. T., Schweitzer, L., & Ng, E. S. (2015). Millennials' work values: Differences across the school to work transition. *Personnel Review, 44*(6), 991–1009.

Lander, M. W., van Oosterhout, J., Heugens, P., & Pruijsers, J. L. (2018). Career stage dependent effects of law firm governance: A multilevel study of professional-client misconduct. *Human Relations, 72*(9), 1497–1529.

Lassance, M. C. P., & Sarriera, J. C. (2012). Saliência do papel de trabalhador, valores de trabalho e desenvolvimento de carreira. *Revista Brasileira de Orientação Profissional, 13*(1), 49–61.

Lee, H.-W. (2020). A career stage analysis of the US federal employees' job satisfaction and turnover intention: A comprehensive overview. *Review of Public Personnel Administration, 40*(4), 1–16.

Lopez, F. G., & Ramos, K. (2016). An exploration of gender and career stage differences on a multidimensional measure of work meaningfulness. *Journal of Career Assessment, 25*(3), 423–433.

Low, C. H., Bordia, P., & Bordia, S. (2016). What do employees want and why? An exploration of employees' preferred psychological contract elements across career stages. *Human Relations, 69*(7), 1457–1481.

Lunsford, L., Baker, V., & Pičer, M. (2018). Faculty mentoring faculty: Career stages, relationship quality, and job satisfaction. *International Journal of Mentoring and Coaching in Education, 7*(2), 139–154.

McCormick, J., & Barnett, K. (2008). A multilevel investigation of relationships between Australian teachers’ career stages and locus of control. *Journal of Educational Administration, 46*(1), 8–24.

McElroy, J. C., Rodriguez, J. M., Griffin, G. C., Morrow, P. C., & Wilson, M. G. (1993). Career stage, time spent on the road, and truckload driver attitudes. *Transportation Journal, 33*(1), 5–14.

Mehta, R., Anderson, R., Dubas, K., Dubinsky, A., & Liu, S. (1999). How do sales managers perceive their roles? *Journal of Managerial Issues, 11*(4), 406–426.

Mehta, R., Anderson, R. E., & Dubinsky, A. J. (2000). The perceived importance of sales managers’ rewards: A career stage perspective. *Journal of Business and Industrial Marketing, 15*(3), 507–524.

Morrow, P. C., & McElroy, J. C. (1987). Work commitment and job satisfaction over three career stages. *Journal of Vocational Behavior, 30*(3), 330–346.

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* (pp. 235–259). London: Academic Press.

Nowlin, E., Walker, D., Deeter-Schmelz, D. R., & Haas, A. (2018). Emotion in sales performance: Affective orientation and need for cognition and the mediating role of motivation to work. *Journal of Business and Industrial Marketing, 33*(1), 107–116.

Ornstein, S., Cron, W. L., & Slocum, J. W., Jr (1989). Life stage versus career stage: A comparative test of the theories of Levinson and Super. *Journal of Organizational Behavior, 10*(2), 117–133.

Pires, V., do Nascimento, J. V., Farias, G. O., & Suzuki, C. C. M. (2017). Teaching identity and physical education: A systematic review. *Revista Portuguesa de Educação, 30*(1), 35–60.

Post, C., Schneer, J. A., Reitman, F., & Ogilvie, D. T. (2013). Pathways to retirement: A career stage analysis of retirement age expectations. *Human Relations, 66*(1), 87–112.

Pousa, C., Mathieu, A., & Trépanier, C. (2017). Managing frontline employee performance through coaching: Does selling experience matter? *International Journal of Bank Marketing, 35*(2), 220–240.

Rafiq, M. (2019). The moderating effect of career stage on the relationship between job embeddedness and innovation-related behaviour (IRB). *World Journal of Entrepreneurship, Management and Sustainable Development, 15*(2), 109–122.
Rao, S., Iyengar, D., & Goldsby, T. J. (2013). On the measurement and benchmarking of research impact among active logistics scholars. *International Journal of Physical Distribution and Logistics Management*, 43(10), 814–832.

Rehbock, S. K., Knipfer, K., & Peus, C. (2021). What got you here, won’t help you there: Changing requirements in the pre- versus the post-tenure career stage in academia. *Frontiers in Psychology*, 12, 1–16.

Sabharwal, M. (2014). Is diversity management sufficient? Organizational inclusion to further performance. *Public Personnel Management*, 43(2), 197–217.

Salmela-Aro, K., & Upadyaya, K. (2018). Role of demands-resources in work engagement and burnout in different career stages. *Journal of Vocational Behavior*, 108, 190–200.

Santos, G. G. (2016). Career barriers influencing career success. *Career Development International*, 21(1), 60–84.

Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16, 282–298.

Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222.

**Corresponding author**

Nágila Giovanna Silva Vilela can be contacted at: nagilavilela@gmail.com