

RESEARCH ARTICLE

Fostering retention among project managers through career sustainability

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Abstract

Considering the high turnover rates in project management due to limited development opportunities, this paper examines the role played by career sustainability in addressing this organizational challenge. Career sustainability is defined as the opportunity and capability of individuals to remain in productive and meaningful work overtime, across the lifespan and in changing career contexts. Drawing on sustainable career theory, a conceptual model was tested using partial least squares structural equation modelling (PLS-SEM) with data from 224 project managers. The model incorporates four dimensions of career sustainability – resourcefulness, renewability, flexibility, and integrativeness – as predictors of career satisfaction, well-being, and both organisational and career turnover intentions. Results indicate that resourcefulness and renewability are the strongest predictors of positive outcomes. Socio-demographic analyses suggest that resourcefulness plays a greater role in reducing career turnover among senior professionals, while renewability more strongly enhances well-being for participants without children. These findings provide empirical evidence on the relevance of career sustainability in project-based contexts and offer practical insights for organisations aiming to retain and support their project management workforce.

Keywords

project managers; career sustainability; well-being; turnover intentions; career satisfaction.

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1. Introduction

In the face of rapid technological advancements and market changes, project management plays a critical role in driving innovation and organizational adaptability (Hobday, 2000; Serrador & Pinto, 2015) which is essential for maintaining a competitive edge and meeting evolving customer needs (Conforto et al., 2014). Project management significantly contributes to the economy by facilitating large-scale infrastructure projects, technological innovations, and business expansions (Flyvbjerg, 2017). These projects create jobs, stimulate economic growth, and improve societal well-being (Flyvbjerg, 2017).

Projects are no longer just temporary endeavours limited to an organizational context; they are a fundamental way of organizing human activities, a contemporary phenomenon often referred to as the "projectification" of society, which underscores the increasing prevalence and significance of projects in our daily lives, shaping our actions, conversations, and identities (Lundin, 2016). The Project Management Institute (PMI) predicts that by 2027, employers will need nearly 88 million individuals working in project management-oriented roles, highlighting the substantial job creation potential (PMI, 2017). As the project-based mode of work becomes increasingly dominant, professionals face heightened expectations to adapt quickly, work autonomously, and manage ongoing demands. Li et al. (2025) argue that this transformation in the employment landscape, characterised by rapid change and reduced structural stability, has made career sustainability a pressing concern, especially for individuals in project-intensive environments.

However turnover rates in project management are quite high, encompassing both direct (recruitment, hiring, and training) (Yan & Zhang, 2020) and indirect costs (loss of productivity, decreased team efficiency, potential project delays, loss of project-specific knowledge) (Dai et al., 2015; Longenecker & Scazzero, 2003) which can undermine the effectiveness of project management function (Skulmoski et al., 2021), threatening project continuity and, increasing the risk of project delays and failures (Thamhain, 2014).

These high turnover rates are partly because most project managers are often outsourced (Turner et al., 2009), limiting their opportunities for continuous development and career progression (Hodgson & Paton, 2016), reducing career sustainability (Van der Heijden & De Vos, 2015).

By providing a framework that addresses the long-term viability of careers, it has been recently proposed that career sustainability theory may be an appropriate theoretical framework to study project managers careers (Sundqvist, 2019; Venkatesh et al., 2018) and address turnover in project management (Chin et al., 2022; Skulmoski et al., 2021). Nonetheless, there is a significant lack of empirical research focused on project managers career sustainability (Lo Presti et al., 2021).

Career sustainability is defined as the opportunity and capability of individuals to remain in productive and meaningful work overtime, across the lifespan and in changing career contexts (De Vos et al., 2020; Van der Heijden & De Vos, 2015). Unlike boundaryless or protean career models, which emphasise autonomy and self-direction, sustainable career theory integrates individual and organisational dimensions, focusing on long-term career viability within changing work environments (Lo Presti et al., 2021). The present study adopts Chin et al.'s (2022) operationalisation of career sustainability, which includes four interrelated dimensions: flexibility, resourcefulness, renewability, and integrativeness.

Recent scholarship has sought to refine the concept of career sustainability to better address contemporary career challenges. Greenhaus (2024) defines career sustainability as the capacity to maintain a career characterized by ongoing development, well-being, and employability over the lifespan. This perspective emphasizes the dynamic interplay between individual agency and contextual factors in achieving long-term career success. Incorporating this definition provides a nuanced understanding that aligns with the multidimensional nature of sustainable careers.

Previous research highlights that many organizations do not have dedicated career pathways or support structures for project managers, such as a supportive organizational culture, mentorship programs, training and development opportunities, and effective feedback and performance management systems, which can lead to career stagnation and dissatisfaction (Crawford et al., 2006; Lloyd-Walker et al., 2016). Low career satisfaction not only hampers individual career growth but also increase the intention to leave the organization negatively impacting organizational performance (Ng & Feldman, 2014). Inversely, research indicates that employees who perceive their careers as sustainable report higher levels of career satisfaction (De Vos et al., 2021).

Turner et al. (2008) explored the well-being of project managers and highlighted the unique challenges they face, such as high job demands and stress, which significantly impact their overall well-being. Considering the demanding nature of the job, that often leads to poor well-being, which in turn contributes to turnover (Boudrias et al., 2020), there is a pressing need for research that further explores these challenges to develop strategies that may enhance project managers' well-being (Bredin & Söderlund, 2013). Sustainable careers characterized by continuous learning, adaptability, and work-life balance contribute significantly to employees' overall well-being (Van der Heijden & De Vos, 2015).

By examining the combined effects of career sustainability on career satisfaction, well-being and turnover intention among project managers, this study aims to contribute to the broader discourse on career development and sustainability within the field of project management, providing actionable insights for organizations, policymakers, and practitioners.

The novelty of this study lies in its empirical examination of how career sustainability affects both individual outcomes (career satisfaction and well-being) and behavioural outcomes (organisational and career turnover intention) among project managers - a population facing unique structural and career development challenges. While sustainable career theory has been conceptually proposed as a relevant lens for understanding project-based work, few empirical studies have tested its applicability in this context, even though, the gig economy's expansion has brought career sustainability to the forefront (Wu & Wang, 2025). This study addresses this gap by applying a structural equation model (PLS-SEM) to test a comprehensive model using a sample of 224 project managers, while also exploring the role of socio-demographic factors.

The remainder of the paper is structured as follows: Section 2 presents the theoretical framework and hypotheses development. Section 3 details the methodology, including the sample and measurement instruments. Section 4 presents the results of the analysis. Section 5 discusses the findings and implications of the study, as well as limitations and directions for future research. Section 6 presents a brief conclusion.

2. Background

Employee retention refers to an organisation's capacity to maintain its workforce over time and reduce turnover. In the context of project management, retention poses a unique challenge due to the high-paced, high-responsibility, and often temporary nature of project-based work (Alkhudary & Gardiner, 2021; Lloyd-Walker et al., 2016). The departure of skilled project managers not only disrupts ongoing projects but also threatens organisational learning and performance continuity (Parker & Skitmore, 2005). However, measuring actual retention requires longitudinal data, which is often impractical in empirical research. For this reason, many studies rely on turnover intention—the self-reported likelihood of leaving an organisation – as a commonly accepted proxy for employee retention (Cho et al., 2009; Akdur et al., 2024; Borg & Scott-Young, 2022). Following this approach, this study conceptualises retention as the inverse of organisational turnover intention, operationalised through project managers' intention to leave their current employer.

Turnover intention refers to an individual's subjective assessment of the likelihood of leaving an organization soon (Mowday et al., 1979). It is influenced by personal attitudes and organizational or managerial behaviours (Cho et al., 2009). Turnover intention can be categorized as voluntary or involuntary and is influenced by both internal and external workplace factors such as better job opportunities, organizational dynamics, social influences, and external conditions (Dubey et al., 2016). Poor human resource management often leads to high turnover intention, which is detrimental to organizational success

(Slavich et al., 2014). Limited career advancement opportunities can significantly influence a project manager's intention to leave, since project managers who perceive limited growth and development opportunities within their current organization are more likely to seek employment elsewhere (Armstrong-Stassen & Ursel, 2009). Turnover disrupts and negatively affects the performance of the project team, the project itself, and potentially negates the competitive advantage of the organizations involved (Parker & Skitmore, 2005).

In addition to organizational turnover intention, project managers may experience career turnover intention, which refers to their desire to leave the project management profession entirely (Barthauer et al., 2020). Career turnover intention can arise from burnout, a lack of passion for the profession, and the desire for a career change (Salvagioni et al., 2017a). Project managers who do not find their work fulfilling or aligned with their personal values and interests are more likely to seek alternative career paths (Vandenberghe & Tremblay, 2008). Aligning personal values with career choices contributes to long-term career satisfaction and well-being, thereby decreasing the desire to leave both the organization and the profession (Tsaur & Tang, 2012).

2.1. Career sustainability

Career sustainability is a concept that has gained significant attention in recent years (Chin et al., 2022) due to its relevance in the context of rapid technological changes and evolving labour markets (Bozionelos et al., 2019). Career sustainability refers to the ability of individuals to remain employable over the lifespan by continually adapting to changes in the work environment and personal circumstances, which includes maintaining work-life balance, continuous professional development, and career adaptability to encompass changes in the job market (Van der Heijden & De Vos, 2015). It involves a proactive approach to career management, emphasizing long-term employability, resilience, and adaptability (Van der Heijden & De Vos, 2015).

Clarke (2013) emphasized that sustainable careers are those that are enduring and resilient, allowing individuals to achieve long-term career success while maintaining well-being and satisfaction, also highlighting the importance of adaptability and continuous learning (Clarke, 2013). Savickas (2012), in turn, focused on the life design paradigm, which integrates career sustainability with the ability to construct a coherent career narrative that aligns with personal goals and changing work environments. This approach underscores the role of personal agency and adaptability in career sustainability (Savickas, 2012). De Vos et al. (2020) propose a conceptual model for sustainable careers, emphasizing the following three key components: individual agency (the role of individuals in actively shaping their career paths through proactive behaviours and strategies), contextual factors (the influence of organizational, social, and economic contexts on career sustainability) and career outcomes (the long-term results of career sustainability, including job satisfaction, well-being, and employability) (De Vos et al., 2020). Recent research by Greenhaus et al. (2024) and Borg & Scott-Young (2022) also underscore the need for multifaceted approaches to comprehensively address career sustainability's impact on various career outcomes.

While multiple conceptualisations of career sustainability exist in the literature, this study adopts the framework proposed by Chin et al. (2022), which builds on Newman's (2011) eudaimonic approach. Chin et al.'s model offers a pragmatic, actionable structure derived from cumulative work experiences, and it has been operationalised through four dimensions: flexibility, renewability, integrativeness, and resourcefulness. This approach contrasts with more hedonic and outcomes-based frameworks, such as De Vos et al. (2018), which define sustainable careers in terms of health, happiness, and productivity: these constructs span different domains - physiological, psychological, and performance-related - making them challenging to measure consistently within a single, unified scale. Although those models offer valuable theoretical insights, their broader and more abstract components make them less suitable for scale development and empirical testing. Moreover, the model proposed by Lo Presti et al. (2021), which describes sustainable careers through four theoretical lenses - time, social space, agency, and meaning - is primarily conceptual and not intended as a measurement tool. Chin's framework allows for a more focused and measurable operationalisation of sustainable career practices,

especially relevant for mid-career professionals like project managers, who operate in fast-evolving, project-based environments and must actively mobilise resources to sustain their careers over time.

Newman (2011) combined theories of adult development and career development to define sustainable careers as possessing three key characteristics: renewability, flexibility, and integrity. Building on Newman's (2011) model, Chin et al. (2019) extended this framework by adding a fourth dimension - resourcefulness - and developed a scale to measure career sustainability that included four dimensions of a sustainable career (Chin et al., 2022):

- Flexibility - refers to holding a flexible, adaptable attitude that enables individuals to continuously learn, seek new opportunities, and remain open to new experiences.
- Renewability - reflects the extent to which careers provide opportunities for individuals to reassess their capabilities, update their skills, and rebrand themselves to maintain career sustainability.
- Integrativeness – relates to the extent to which employees can critically evaluate, integrate, and absorb disparate information and knowledge acquired in their current jobs to further develop their careers.
- Resourcefulness - embodies the vital importance of using resources effectively to maintain a good standard of living and ensure future employment opportunities. This includes leveraging networks, time, and financial resources to navigate career challenges and opportunities successfully.

Career sustainability adds to and interacts with several other career theories, providing a better understanding of career development and management. Career sustainability builds on the protean career theory (Hall, 2004), that describes career paths as self-directed, values-driven and, characterized by adaptability and continuous learning, by adding the dimension of long-term employability and work-life balance (Gubler et al., 2014). Career sustainability also complements boundaryless career theory (Arthur, 1996) that suggests careers are not confined to a single organization but span multiple employers and roles, by focusing on the skills and adaptability needed to navigate such fluid career paths while ensuring long-term employability and satisfaction (Baruch & Sullivan, 2022). Career sustainability also adds to career construction theory (Savickas, 2012) that posits individuals build their careers by interpreting and adapting it to their life experiences, by emphasizing the importance of continuous skill development and adaptability in constructing a sustainable career.

Sustainable career theory aligns with broader trends in sustainable development, emphasizing the need for careers that not only support individual and organizational goals but also contribute positively to society and the environment (Donald et al., 2024). This approach encourages individuals to consider the broader impact of their career choices and to strive for a balance between personal success and social responsibility (De Vos et al., 2016).

Considering the ever-evolving landscape of project management, project managers must embrace career sustainability as it becomes imperative for fostering resilient careers and contributing to organizational success in an increasingly complex world (Westerman et al., 2020).

The hypotheses in this study were directly derived from the four-dimensional model proposed by Chin et al. (2022), which operationalises career sustainability through flexibility, renewability, integrativeness, and resourcefulness. Each hypothesis reflects how these dimensions function in real-life professional contexts and is supported by a broader body of literature on sustainable careers (De Vos & Van der Heijden, 2015; Van der Heijden, De Vos, & Akkermans, 2020). For instance, resourcefulness, defined as the capacity to effectively mobilise networks, time, and financial assets, is expected to enhance career satisfaction and well-being while reducing turnover intentions by equipping professionals to navigate uncertainty and seize opportunities (Hobfoll, 2002). Renewability reflects the ability to update skills and rebrand oneself, supporting long-term engagement and satisfaction (Fugate et al, 2004). Flexibility enables individuals to adjust to evolving demands and roles, thereby fostering autonomy and adaptability in increasingly dynamic work environments (Arthur & Rousseau, 1996; Hall, 2004). Integrativeness, or the capacity to synthesise diverse knowledge sources, supports continuous learning and complex problem-solving, which can contribute to more positive career evaluations (Pulakos et al., 2000).

To improve practical understanding, we further illustrate how the four dimensions of career sustainability manifest in real-life professional contexts. Flexibility refers to the ability of project managers to adapt to evolving methodologies (e.g., agile vs. waterfall), collaborate across diverse teams, or assume new roles within dynamic projects. This aligns with the notion of adaptive project management competence, which is increasingly required in turbulent environments (Turner, 2016). Renewability is evident in the continuous pursuit of professional development, including the acquisition of certifications (e.g., PMP, Scrum Master), upskilling in digital tools, and engaging in reflective learning practices – critical behaviours for maintaining long-term employability and credibility (Crawford, 2005). Integrativeness involves synthesising knowledge gained across projects, learning from interdisciplinary teams, and applying lessons learned to new challenges – practices associated with knowledge integration and organisational learning in project-based work (Scarborough et al 2004). Finally, resourcefulness reflects a project manager’s ability to navigate constraints by leveraging networks, managing competing stakeholder demands, and optimising time and financial resources – skills considered central to effective project leadership and stakeholder management (Müller & Turner, 2010). These dimensions reflect the actionable behaviours and strategies that mid-career professionals rely on to sustain their careers in high-demand, complex project environments.

Careers that provide professional growth and adaptability, opportunities for skill development, alignment with personal values, and effective resource use, lead to reduced desire to leave both the organization and the profession (Barthauer et al., 2020). We propose the following hypothesis in the context of project management careers:

H1: Career sustainability is negatively related to organizational turnover intentions.

H1a: Flexibility dimension of career sustainability is negatively related to organizational turnover intentions.

H1b: Resourcefulness dimension of career sustainability is negatively related to organizational turnover intentions.

H1c: Renewability dimension of career sustainability is negatively related to organizational turnover intentions.

H1d: Integrativeness dimension of career sustainability is negatively related to organizational turnover intentions.

H2: Career sustainability is negatively related to career turnover intentions.

H2a: Flexibility dimension of career sustainability is negatively related to career turnover intentions.

H2b: Resourcefulness dimension of career sustainability is negatively related to career turnover intentions.

H2c: Renewability dimension of career sustainability is negatively related to career turnover intentions.

H2d: Integrativeness dimension of career sustainability is negatively related to career turnover intentions.

2.2. Career satisfaction

Career satisfaction measures how well individuals believe their career progress aligns with their goals, values, and preferences (Seibert & Kraimer, 2001). While often considered a facet of work satisfaction alongside job satisfaction, career satisfaction is distinct as it encompasses one’s overall experiences throughout their entire career, and it is the most prevalent measure of subjective career success (Hall & Chandler, 2005).

Previous studies suggest that sustainable career practices, such as lifelong learning and proactive career management, increase career satisfaction by aligning career trajectories with personal aspirations and market demands (De Vos et al. (2011). Clarke (2013) also emphasizes that employees who engage in regular skill development and learning activities are more likely to feel confident and satisfied with their career progression. Baruch and Vardi (2016) found that individuals who exhibit higher levels of career adaptability, experience greater career satisfaction. This adaptability allows employees to navigate career transitions smoothly, thereby reducing stress and increasing overall job fulfilment (Baruch & Vardi, 2016). Therefore, following (Chin et al., 2022) we propose that career sustainability is positively related to career satisfaction for project managers:

H3: Career sustainability increases career satisfaction.

H3a: Flexibility dimension of career sustainability increases career satisfaction.

H3b: Resourcefulness dimension of career sustainability increases career satisfaction.

H3c: Renewability dimension of career sustainability increases career satisfaction.

H3d: Integrativeness dimension of career sustainability increases career satisfaction.

Previous research shows that employees who are satisfied with their jobs and/or careers are less likely to leave their organizations or consider changing careers (Griffeth et al., 2000; Hur, 2024; Igbaria & Guimaraes, 1999; Nicholson & De Waal-Andrews, 2005). Therefore, we propose that enhancing career satisfaction can decrease the likelihood of employees leaving both the organization and the profession of project management:

H4: Career satisfaction reduces turnover intention.

H4a: Career satisfaction reduces organizational turnover intention.

H4b: Career satisfaction reduces career turnover intention.

2.3. Well-being

Well-being encompasses an individual's overall assessment of life satisfaction, mental health, and sense of purpose (Deci et al., 2017). This approach acknowledges well-being as more than the absence of illness, emphasizing a positive state characterized by thriving across various life domains (Huppert & So, 2013). The concept of well-being finds its roots in ancient philosophy, notably Aristotle's notion of eudaimonia, or human flourishing (Ryff & Singer, 2008). This foundational idea underpins contemporary understandings focused on achieving potential and living a fulfilling life (Waterman et al., 2010). Recent research expands well-being models to include an equilibrium between an individual's resources and challenges (Deci et al., 2017).

Previous studies have emphasized the impact of employee well-being on several organizational outcomes, namely organizational success (Salvagioni et al., 2017), job performance (Kundi et al., 2021), organizational and career turnover intention (Akdur et al., 2024; Boudreau & Rhéaume, 2024; Putri et al., 2024; Zimeng & Ho, 2023). Thus, while psychological distress increases turnover intentions (Chughtai, 2021), experiencing well-being in the workplace reduces the likelihood of employees leave their organization or profession (Kundi et al., 2020; Salvagioni et al., 2017c). Therefore, we propose the following hypothesis:

H5: Employee well-being is negatively related to turnover intention.

H5a: Employee well-being is negatively related to organizational turnover intention.

H5b: Employee well-being is negatively related to career turnover intention.

In project management, work-related stressors like strict deadlines and overload can lead to diminished well-being (Hämmig & Bauer, 2009; Hrvatin et al., 2022; Turner et al., 2008). Project managers who maintain a balance between their professional and personal lives, continuously engage in learning, and adapt to changing work environments are more likely to experience high levels of well-being (Moradi et al., 2020). De Lange et al. (2003) found that career sustainability practices, such as continuous skill development and proactive career management, mitigate the adverse effects of job stress, leading to improved well-being. Similarly, Tams & Arthur (2010) demonstrated that employees who actively manage their careers by setting goals and seeking development opportunities experience greater career satisfaction and overall well-being. Therefore, we propose that:

H6: Career sustainability increases well-being.

H6a: Flexibility dimension of career sustainability increases well-being.
H6b: Resourcefulness dimension of career sustainability increases well-being.
H6c: Renewability dimension of career sustainability increases well-being.
H6d: Integrativeness dimension of career sustainability increases well-being.
Figure 1 depicts the research model and the research hypotheses under study.

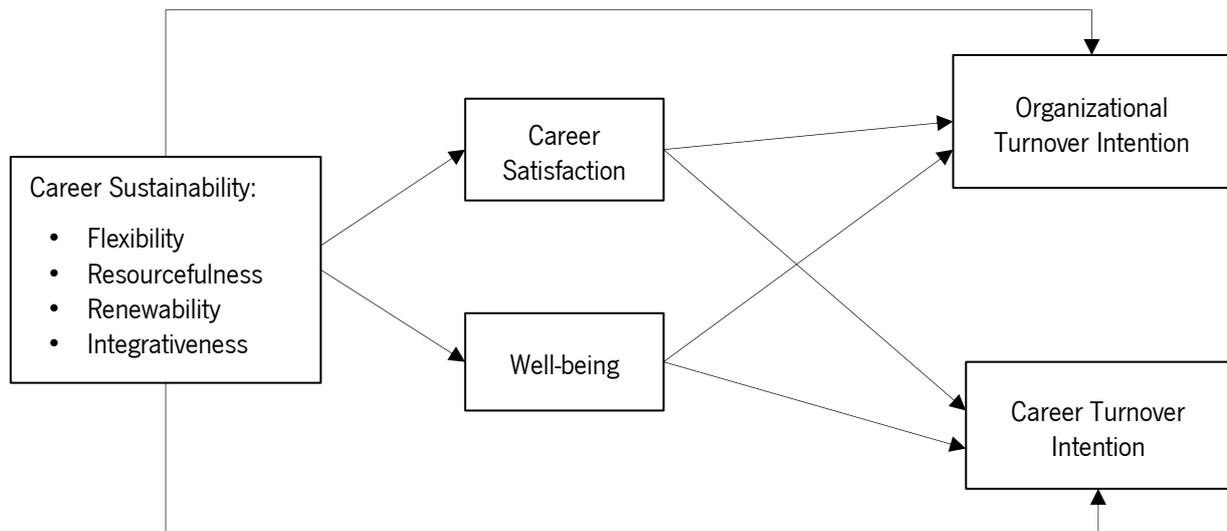


Fig. 1. Research model

3. Method

Lo Presti et al. (2021) demonstrated that project managers' careers could serve as a prototypical example of sustainable careers. Their study adopted a qualitative approach to delve deeply into individual career narratives, thereby uncovering underexplored issues and peculiarities that future research could investigate further using quantitative methods. Following their recommendations, we chose a quantitative methodology to explore the consequences of career sustainability for project managers.

3.1. Data collection and Sample

Data collection followed a snow-ball approach, where an initial pool of project managers, identified through personal contacts received an e-mail with an internet link to a questionnaire located on the Qualtrics platform, during the period from May to July 2023. Participants were encouraged to share the link to other project managers of their acquaintance. To ensure that all participants in the study were actively serving as project managers, an inclusion criterion was implemented at the beginning of the questionnaire. Following the recommendation of Randel & Jaussi (2008), a pre-test was conducted to assess the appropriateness and clarity of the questionnaire for the target group. Also, as per their suggestion, demographic variables were positioned at the end of the questionnaire.

Out of the total sample of 224 participants, 95.8% reside in Portugal. Most of the respondents (63.1%) identify as male. Most participants (76.1%) are in-house employees, being the other 23.9% outsourced. 72.8% of participants work on site at least two days/week. Furthermore, 49.1% are aged 35 or younger. Approximately 50.5% of participants have children,

with the majority having only one child. 54.3% of participants work in the IT sector. Nearly half of the participants (49.8%) have less than 5 years of professional experience, and a significant portion (64.5%) have completed a master's degree. Most participants work in medium to large corporate organisations, particularly in the IT, finance, and engineering sectors. Their work primarily involves organisational and operational-level projects rather than large-scale infrastructure or megaprojects. As such, the results of this study are most applicable to project managers operating in internal, business-driven project environments.

Hair et al. (2017) emphasise that Partial Least Squares Structural Equation Modelling (PLS-SEM) is particularly well-suited for exploratory research and situations involving smaller sample sizes, making it more appropriate than covariance-based SEM in such contexts. With a sample of 224 project managers, this study exceeds the minimum recommended sample size to ensure model stability and statistical power when using PLS-SEM (Huang, 2021; Indriyarti et al., 2022). Furthermore, PLS-SEM is known for its flexibility in handling complex models, especially when the primary goal is to maximise explained variance rather than confirm established theoretical frameworks (Hair et al., 2017). The method has also been widely applied in career sustainability and project management research to estimate relationships between latent constructs. For example, Chin et al. (2022) employed PLS-SEM to develop and validate the Career Sustainability Scale, further demonstrating the method's suitability for studying nuanced career-related variables.

To conduct the analysis, we followed the two-stage approach recommended by Hair et al. (2019), starting with the assessment of the measurement model (including reliability, convergent and discriminant validity), followed by structural model evaluation to test the proposed hypotheses. Additionally, we performed multi-group analyses (MGA) to explore whether the structural relationships varied across key socio-demographic groups. These groups included gender, age, parenting status, project management seniority, employment contract type (in-house vs. outsourced), and industry (IT vs. non-IT).

3.2. Instrument

The instrument included four distinct scales to measure the constructs under study – career satisfaction, well-being, turnover intention, career turnover intention and career sustainability. All scales were previously validated in other studies. A consistent 5-point Likert scale was employed across all measures, where 1 denoted "Strongly Disagree" and 5 "Strongly Agree."

Well-being was gauged using the 5-item "Satisfaction with life Scale" (SWLS) from Diener et al. (1985). Respondents indicated their level of agreement with each of the five statements (e.g., "*In most ways my life is close to my ideal*").

Career satisfaction was measured using 5 items adapted from Greenhaus et al. (1990) Respondents indicated their level of agreement with each of the five statements, prefaced with the stem "I am satisfied with" (e.g., "*Success I have made toward meeting my overall career goals.*").

Organizational turnover intention was measured using the 3-item scale originally developed by Cammann (1979). An example item is: "*I will probably look for a new job as project manager in the next year.*"

Career turnover intention was assessed using the "Career turnover intentions Scale" adapted from Baillo & Semmer (1994), comprising three items (e.g., "*I think a lot about leaving the profession of project manager*").

To measure career sustainability was used the 12-item "Career Sustainability Scale" developed by Chin et al. (2022). The scale has four dimensions, each one measured by three items: Resourcefulness (e.g., "*My career allows me to seek new opportunities.*"); Renewability (e.g., "*My career provides me opportunities to update my skills.*"); Flexibility (e.g., "*My career gives me a lot of flexibility*") and, Integrativeness (e.g., "*My career enables me to integrate information obtained from different sources.*"). A complete list of the measurement items is provided in Appendix A.

4. Results

4.1. Data analysis

Considering that the paper addresses multiple relationships, Structural Equations Modelling (SEM) is used for data analysis. More specifically, we use Partial Least Squares-SEM (PLS-SEM), due to its reliability in estimating composite factor models for being less affected by errors in subparts of the model (Henseler et al., 2014). This method also allows to estimate complex models without needing data to follow a normal distribution, showing greater statistical power when compared to CB-SEM (Covariance-Based Structural Equation Modelling) (Shela et al., 2023). PLS is a suitable tool for exploratory research, since it focuses on explaining the variance in the dependent variables of the model (Hair & Sarstedt, 2021).

It's crucial for researchers to recognize that PLS-SEM, it is not exempt from basic multivariate regression assumptions. Therefore, it's essential to conduct tests before running the measurement and structural model analyses (Shela et al., 2023).

4.2. Analysis of the measurement models

We proceeded with the analyse of the reliability and validity of the scales. As far as reliability is concerned, we started with the analysis of indicator reliability. Two items of the Well-being variable, one items of the Resourcefulness variable and one item of the Renewability variable had standardized loadings below the threshold of 0.7 and were thus deleted (Hair et al., 2019). Subsequently, we analysed the reliability of the latent variables. Except for the flexibility variable, all measurement models surpass the recommended internal consistency threshold of 0.7. Thus, flexibility was excluded from the model. Table 1 presents the Cronbach alphas and the composite reliabilities of the remaining variables.

Table 1. Reliability and validity measures

	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
Career Satisfaction	0.873	0.908	0.665
Career Turnover Intention	0.874	0.922	0.798
Integrativeness	0.850	0.907	0.765
Renewability	0.776	0.899	0.816
Resourcefulness	0.742	0.886	0.795
Organisational Turnover Intention	0.821	0.892	0.733
Well-being	0.780	0.872	0.694

Since the average variance extracted (AVE) by each latent variable exceeds the threshold of 0.5 (Table 1), and the bootstrap t-statistics of the indicators' standardized loadings are significant at the 1 percent significance level, we conclude that the model has convergent validity (Hair *et al.*, 2017). For discriminant validity, we used the Heterotrait-Monotrait (HTMT) Ratio (Henseler *et al.*, 2015). The upper bound of the 95 per cent confidence interval of HTMT is lower than the more conservative threshold of 0.85, indicating that are no discriminant validity problems (Table 2). Cross-loadings are presented in Appendix B to further support discriminant validity.

Table 2. Discriminant validity – Heterotrait-monotrait

	(1)	(2)	(3)	(4)	(5)	(6)
Career Satisfaction						
Career Turnover Intention	0.178					
Renewability	0.510	0.342				
Resourcefulness	0.723	0.443	0.667			
Organisational Turnover Intention	0.229	0.438	0.145	0.407		
Well-being	0.533	0.199	0.457	0.701	0.169	

Table 2 shows that the measurement models present discriminant validity. The upper bound of the 95 per cent confidence interval of Heterotrait-Monotrait (HTMT) is lower than the more conservative threshold of .85, indicating that there are no discriminant validity problems.

Considering that we used self-report measures for all variables, common method bias was assessed. Kock (2015) full collinearity assessment approach evidenced that all variance inflation factor values remained below the 5.0 threshold, indicating the absence of common method bias in the model.

4.3. Analysis of the structural model

To test the research hypotheses, the analysis of the structural model was conducted (Henseler et al., 2009) and the significance of the path coefficients was analysed. Figure 2 presents the significant relationships found in the model (t value < 1.96; $p < .05$).

Two dimensions of career sustainability – resourcefulness and renewability - have a positive impact on career satisfaction ($B=0.522$ and $B=0.170$, respectively; $p<0.05$) and on well-being ($B=0.410$ and $B=0.173$, respectively; $p<0.05$) and a negative impact on career turnover intention ($B=-0.287$ and $B=-0.163$, respectively; $p<0.05$). The resourceful dimension also has a negative impact on organizational turnover intention ($B=-0.306$; $p<0.01$). Resourcefulness on career satisfaction and resourcefulness on well-being show strong effects. Renewability on career satisfaction, renewability on well-being, resourcefulness on career turnover intention, renewability on career turnover intention, and resourcefulness on organizational turnover intention show moderate effects (Cohen, 1988).

Table 3 exhibits the direct significant effects and the effect sizes (f^2) for each validated hypothesis.

Several hypothesised relationships did not reach statistical significance and were therefore not supported by the data. Specifically, no significant effects were found for H1c (Renewability → Organisational Turnover Intention), H1d (Integrativeness → Organisational Turnover Intention), H2d (Integrativeness → Career Turnover Intention), H3d (Integrativeness → Career Satisfaction), and H6d (Integrativeness → Well-being). Additionally, contrary to expectations, H4a and H4b (Career Satisfaction → Organisational and Career Turnover Intention, respectively), as well as H5a and H5b (Well-being → Organisational and Career Turnover Intention), were not statistically significant. These non-significant paths are highlighted in Table 3. Potential explanations for these results, and their implications for theory and practice, are explored in the Discussion section.

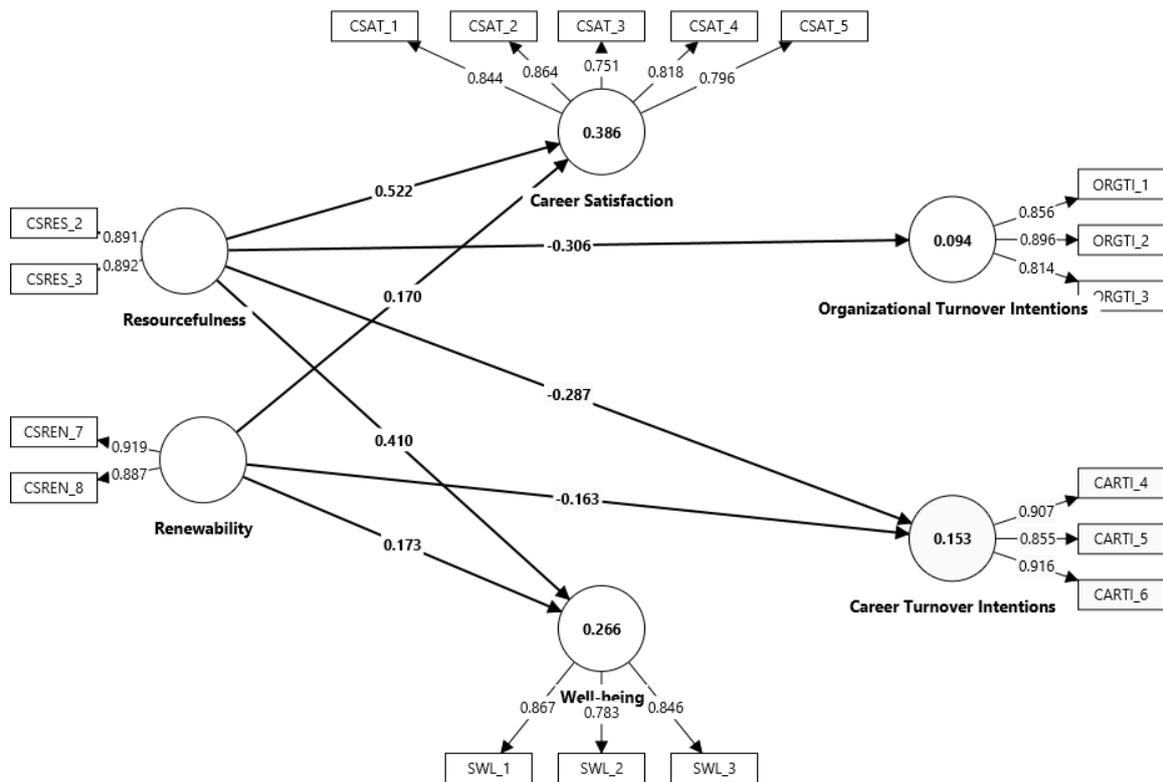


Fig. 2. Structural model

Table 3. Direct significant effects and f^2

H	Relationships	B	t	p	f ²
3c	Renewability -> Career Satisfaction	0.170	2.284	0.022	0.037
2c	Renewability -> Career Turnover Intention	-0.163	2.249	0.025	0.024
6c	Renewability -> Well-being	0.173	2.020	0.043	0.032
3b	Resourcefulness -> Career Satisfaction	0.522	9.354	<0.001	0.345
2b	Resourcefulness -> Career Turnover Intention	-0.287	3.381	0.001	0.075
1b	Resourcefulness -> Organizational Turnover Intention	-0.306	4.586	<0.001	0.103
6b	Resourcefulness -> Well-being	0.410	6.397	<0.001	0.178

To evaluate the explanatory power of the model, the coefficient of determination (R^2) of the endogenous constructs was analysed (Sarstedt et al., 2014). The model explains 38.6% of variance for career satisfaction, 26.6% of variance for well-being, 15.3% of variance for career turnover intention and 9.4% of variance for organizational turnover intention (Table 4).

Table 4. Explanatory power and predictive relevance.

	R^2	R^2 adjusted	Q^2
Career Satisfaction	0.386	0.380	0.369
Career Turnover Intention	0.153	0.145	0.128
Organizational Turnover Intention	0.094	0.090	0.080
Well-being	0.266	0.259	0.247

To evaluate the predictive relevance of the model, the Stone–Geiser’s Q^2 was calculated using the blindfolding procedure. Since $Q^2 > 0$ for all the endogenous constructs (Table 4), the model has predictive relevance (Hair et al., 2011).

To analyse the effects of socio-demographic variables on the relationships considered in the model, multi-group analyses were conducted. It was analysed gender (male/female), parenting (child/no child), age (≤ 35 years old/ > 35 years old), seniority in the profession of project management (< 5 years/ ≥ 5 years), employment contract (in house/outsourced), and industry (IT/other than IT). Concerning seniority in the profession, results show that the negative impact of resourcefulness on career turnover intention is stronger for senior project managers ($B_{<5\text{years}} = -0.086$; $B_{\geq 5\text{years}} = -0.441$; $p = 0.042$). In what refers to the parenting situation, the impact of renewability on well-being is negative for those who have children but positive for those who do not have ($B_{\text{child}} = -0.230$ and $B_{\text{nochild}} = 0.414$, respectively; $p = 0.035$).

5. Discussion

Both resourcefulness and renewability dimensions of career sustainability play crucial roles in shaping project managers experiences, promoting career satisfaction (Chin et al., 2022) and, well-being (De Lange et al., 2003). The robust positive relationship of resourcefulness with career satisfaction and well-being underscores its significance beyond its traditional role in project management responsibilities (El-Sabaa, 2001). Resourcefulness not only ensures project managers’ success in completing projects but also enhances their sense of accomplishment and personal well-being.

Furthermore, resourcefulness reduces employees’ intention to leave either the organization or the project management profession (Han et al., 2023). Additionally, opportunities for skill development and career growth mitigate the risks of skill obsolescence, enhance employees’ perceptions of their future career prospects and reducing employees’ intention to leave the project management career (Abid et al., 2016; Harden et al., 2018; Salleh et al., 2020).

Concerning seniority in the profession, results show that the negative impact of resourcefulness on career turnover intention is stronger for senior project managers, which can be explained by the higher level of commitment and integration into the organizational culture that senior project managers typically possess (Chipulu et al., 2013). As they gain more experience and seniority, their deepening ties and responsibilities within the organization might make the idea of turnover more impactful, hence a stronger negative effect on career turnover intention. Additionally, senior project managers often have a greater sense of resourcefulness, which can enhance their ability to navigate and mitigate career challenges, reducing their inclination to leave (Paton & Hodgson, 2016).

In what refers to the parenting situation, the impact of renewability on well-being is negative for those who have children but positive for those who do not have. This could be explained by the additional stress and time demands placed on individuals who have children (Chasserio & Legault, 2010), which may reduce their capacity to renew themselves effectively. Parents often face significant challenges in balancing work and family responsibilities, which can negatively impact their overall well-being. Conversely, individuals without children might have more time and resources to focus on renewal activities, thereby experiencing a positive effect on their well-being. Studies have indicated that the challenges of parenting can increase stress and decrease overall life satisfaction, thereby impacting well-being negatively (An et al., 2019).

Several relationships expected to be significant were not supported by the data, offering important insights into how career sustainability operates in the specific context of project management. The integrativeness dimension did not show a meaningful influence on turnover intentions, career satisfaction, or well-being. While the ability to combine knowledge and skills from various experiences may be conceptually valuable (Chin et al., 2022), it may not directly affect affective outcomes unless reinforced by enabling organisational conditions such as recognition, autonomy, or support (De Vos & Van der Heijden, 2017). In highly dynamic and task-oriented environments like project-based work, integrative capabilities may function more as background strengths, indirectly contributing to performance but not necessarily to individual career perceptions in the short term (Söderlund & Bredin, 2006).

Similarly, although renewability was linked to reduced intentions to leave the profession, it did not significantly influence the desire to leave one's current organisation. This suggests that the opportunity to update skills supports long-term professional engagement, but it may not be sufficient to retain talent within a particular organisational setting. As previous research highlights, retention in project-based roles often hinges on contextual factors such as perceived organisational support and quality of project assignments (Hobday, 2000; Keegan & Den Hartog, 2004). Project managers may feel equipped and motivated to continue in the profession but still seek more favourable organisational contexts in which to do so.

Unexpectedly, the results also showed that career satisfaction and well-being did not significantly reduce either organisational or career turnover intentions. This challenges traditional assumptions linking positive affective states to retention (Greenhaus et al., 1990; Judge et al., 1997). In the boundaryless and protean career landscapes that characterise project management work (Arthur & Rousseau, 1996; Briscoe & Hall, 2006), professionals may proactively seek mobility and change as part of career self-management, even when they are satisfied or psychologically well. As such, turnover may reflect strategic career decisions rather than dissatisfaction, particularly in sectors where short-term contracts, outsourcing, and shifting priorities are common (Bredin & Söderlund, 2013; Clarke, 2013).

The spread of the sample across different socio-demographic groups adds nuance to the interpretation of the findings. The fact that the structural model held consistently across employment types (in-house vs outsourced) and industry sectors (IT vs non-IT) suggests that the relationships between career sustainability and its outcomes are broadly applicable across varied organisational contexts. This aligns with prior findings that sustainable career mechanisms are generally robust across diverse environments (De Vos et al., 2020; Donald et al., 2024).

At the same time, the observed differences based on seniority and parenting status highlight how specific dimensions of career sustainability may interact with personal and professional life stages. For instance, senior professionals often accumulate greater personal agency and social capital, which may enhance the protective role of resourcefulness against career turnover (Borg et al., 2023; Clarke, 2013). Similarly, the moderating effect of parental responsibilities on the relationship between renewability and well-being reflects the dual demands faced by working parents, especially in project-based roles, where time autonomy and flexibility are limited (Chasserio & Legault, 2010; Turner et al., 2008).

These findings suggest that while sustainable career dynamics are relevant across contexts, their impact is shaped by life-course variables and must be interpreted through a lens sensitive to individual circumstances (Tordera et al., 2020; Van der Heijden & De Vos, 2015). Despite the overrepresentation of in-house professionals and IT sector employees, the sample distribution allowed for meaningful comparison, and the multi-group analysis confirmed the structural model's overall robustness. However, the moderating effects of seniority and parenting underline the need for contextualised career support strategies, tailored to professionals' evolving needs across life stages.

5.1. Theoretical and Practical Implications of the study

This study significantly advances the career sustainability theory and extends theoretical frameworks in several keyways. Firstly, this study contributes by providing empirical evidence on the relevance of the resourcefulness dimension of career sustainability, which is still an understudied dimension. This is particularly noteworthy due to the explanatory power of resourcefulness for critical dependent variables such as career turnover intention, organizational turnover intention, well-being, and career satisfaction. Secondly, by examining the differentiated effects of the four dimensions of career sustainability on several organizational outcomes, this study extends existing theories of career development (Greenhaus et al., 2024). Thirdly, the model demonstrates that when employees perceive their careers as resourceful and renewable, they are more likely to experience higher levels of career satisfaction and psychological well-being. This reinforces the findings of prior studies that have linked career sustainability to enhanced career satisfaction and mental health (Tordera et al., 2020). The positive relationship between resourcefulness and career satisfaction, well-being, and retention, shows the importance of project managers effectively utilizing their resources, specifically by leveraging networks, time and financial resources, to navigate career challenges and opportunities successfully to improve career outcomes. Also, the positive relationship between renewability and career satisfaction highlights the importance of adaptability and continuous learning in fostering long-term career fulfillment (Alkhudary & Gardiner, 2021; Heslin et al., 2020). This indicates that continuous professional development is a key factor in career sustainability, which is an important contribution for the career sustainability framework.

Furthermore, by uncovering the role of resourcefulness in project management, i.e., leveraging resources efficiently to address the challenges posed by dynamic and temporary project environments (Müller & Turner, 2010), and renewability in project management, i.e., continuous professional development and skill enhancement to update for the latest tools, techniques, and methodologies to manage projects effectively (El-Sabaa, 2001.), in mitigating turnover intentions, we provide a more comprehensive understanding of the mechanisms through which individuals navigate their careers within project-based environments, i.e., the career sustainability dimensions that allow project managers to be better equipped to handle project demands (Parker & Skitmore, 2005).

We present and validate a comprehensive model that elucidates the specific dimensions through which career sustainability exerts its influence on both career turnover and organizational turnover. By identifying these dimensions - resourcefulness and renewability - we provide a nuanced understanding of how sustainable career practices can mitigate turnover rates. This model extends the theoretical framework proposed by De Vos et al. (2020), by linking specifically two dimensions of career sustainability on career outcomes such as career satisfaction, well-being and turnover intention. Resourcefulness can be viewed as a critical competency, enabling individuals to effectively utilize resources and opportunities within their careers, which aligns with the emphasis on individual agency in De Vos et al.'s model (De Vos et al., 2020). Renewability emphasizes the importance of ongoing learning and adaptation, aligning with the contextual factors in De Vos et al.'s model, since it highlights the dynamic nature of career sustainability and the need for continuous skill renewal (De Vos et al., 2020). We advocate that this study contributes to the theoretical literature by introducing a validated model that identifies the dimensions of career sustainability that are more relevant in explaining project managers' career satisfaction, well-being and turnover, while also contributing to a more general understanding of career

sustainability by illustrating how resourcefulness and renewability lead to enhanced career satisfaction, well-being, and employability over time.

This study makes a distinct theoretical contribution by advancing the operationalisation of career sustainability within project-based contexts. While previous frameworks, such as those by De Vos et al. (2020) and Lo Presti et al. (2021), offer rich conceptual models, they lack empirically tested, multidimensional measurement tools suited for high-mobility, dynamic roles like project management. By validating Chin et al.'s (2022) four-factor model—particularly highlighting the critical role of resourcefulness and renewability—this study demonstrates which specific dimensions are most predictive of meaningful career outcomes. It thus offers a more granular understanding of how career sustainability functions in boundaryless, time-bound work environments and provides a theoretical basis for future studies to explore career sustainability across different professional ecosystems.

The practical implications of our research are manifold and offer actionable recommendations for organizations, policymakers, and practitioners in the field of project management. Firstly, organizations can leverage our findings to design more effective talent management strategies that prioritize the cultivation of resourcefulness and renewability among project managers (Morin et al., 2015). By providing access to relevant resources (e.g., networks, time, and financial resources) and opportunities for continuous learning and skill development, organizations can create a supportive work environment conducive to career satisfaction, retention, and well-being (Ekrot et al., 2018; Harris & Cameron, 2005).

HR departments and project-based organisations should consider implementing systems that embed sustainability into career development frameworks—such as structured resource access (e.g., mentoring programs, career coaching, learning budgets) and long-term professional development plans aligned with project rotations. These practices not only increase individual well-being and satisfaction but also serve as organisational retention tools, helping to reduce turnover in critical roles. Such alignment between individual agency and organisational support is consistent with Van der Heijden, De Vos, and Akkermans et al. (2020), who underscore the mutual responsibility of individuals and organisations in sustainable career management.

Furthermore, practitioners in project management roles can apply our findings directly to their own career development efforts. By prioritizing the acquisition of resourcefulness skills such as leveraging networks, time, and financial resources to navigate career challenges and opportunities successfully (Chin et al., 2022), project managers can enhance their career satisfaction, well-being, and long-term career prospects (De Vos & Van der Heijden, 2017). Similarly, embracing renewability through continuous learning and professional development activities can help project managers navigate the evolving demands of their roles and remain resilient in the face of change (Cristina et al., 2019).

This research offers valuable insights into the benefits of a sustainable career in project management for both professionals and organizations, providing actionable recommendations for enhancing project managers career satisfaction, well-being and retention in the project management profession. By integrating these insights into organizational practices and individual career management efforts, stakeholders can contribute to the creation of a more sustainable and resilient project management workforce (Borg et al., 2023).

6. Conclusion

The high turnover of project managers poses critical challenges for organizations across various industries, impacting project continuity, organizational stability, and financial performance (Hobday, 2000). The findings of this study underscore the importance of fostering both resourcefulness and renewability dimensions of career sustainability to enhance career satisfaction and well-being of project managers while reducing turnover intention.

This study has some limitations. Firstly, the reliance on a convenience sample restricts the generalizability of findings, as noted by Shim et al. (2022). Secondly, the cross-sectional design used in this study limits our ability to establish causal

relationships among variables, as highlighted by Cui et al. (2016). To overcome this constraint, we recommend that future studies adopt longitudinal designs, allowing for the exploration of temporal sequences and causal links between the variables in question.

Additionally, the use of self-report measures introduces the potential for social desirability bias, compromising the reliability of the obtained data, as cautioned by Van De Mortel (2008). Participants may have responded in ways they perceived as socially acceptable, thereby affecting the accuracy of the results. To enhance the robustness of future investigations, researchers should consider supplementing self-report measures with data from alternative sources, such as evaluations from supervisors or peers, facilitating data triangulation and ensuring greater accuracy (Van De Mortel, 2008).

Our findings provide a foundation for future research and offer practical insights for organizations seeking to enhance project managers retention through sustainable career practices. Future research should continue to explore these dimensions in various contexts and further validate the proposed model to enhance its generalizability and practical application.

Further avenues for research could include longitudinal studies to gain a more dynamic understanding of how career sustainability influences career satisfaction, well-being, and turnover intentions over time (Ng et al., 2024). Additionally, exploring the mediating and moderating roles of variables such as organizational support (Noto et al., 2023) could offer nuanced insights into these relationships. Given the growing prevalence of remote and hybrid work models, investigating how career sustainability operates within these contexts would be particularly valuable. Finally, integrating qualitative methods (Noto et al., 2023) could uncover the personal and contextual factors contributing to sustainable career practices, providing a richer understanding.

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Appendix A. Measurement items

All items were measured on a 5-point Likert scale ranging from 1 (“Strongly disagree”) to 5 (“Strongly agree”). The table below presents the full set of items used in the study.

Table A1. Full List of Measurement Items for Constructs

Construct	Item	Statement	Source
Career Satisfaction	CSAT_1	I am satisfied with the success I have achieved in my career.	Greenhaus et al. (1990)
	CSAT_2	I am satisfied with the progress I have made toward meeting my overall career goals.	
	CSAT_3	I am satisfied with the progress I have made toward meeting my goals for income.	
	CSAT_4	I am satisfied with the progress I have made toward meeting my goals for advancement.	
	CSAT_5	I am satisfied with the progress I have made toward meeting my goals for the development of new skills.	
Well-being	SWL_1	In most ways my life is close to my ideal.	Diener et al. (1985)
	SWL_2	The conditions of my life are excellent.	
	SWL_3	I am satisfied with my life.	
	SWL_4	So far I have gotten the important things I want in life.	
	SWL_5	If I could live my life over, I would change almost nothing.	
Organizational Turnover Intention	ORGTI_1	I will probably look for a new job as project manager in the next year.	Cammann (1979)
	ORGTI_2	I often think about quitting my job.	
	ORGTI_3	I intend to search for a position with another employer within the next year.	
Career Turnover Intention	CARTI_1	I think a lot about leaving the profession of project manager.	Baillod & Semmer (1994)
	CARTI_2	I am seriously considering changing careers.	
	CARTI_3	I often think that project management may not be the right profession for me.	
Career Sustainability – Resourcefulness	CSRES_1	My career allows me to seek new opportunities.	Chin et al. (2022)
	CSRES_2	My career enables me to effectively use my network to achieve my goals.	
	CSRES_3	My career allows me to allocate my time and financial resources effectively.	
Career Sustainability – Renewability	CSREN_1	My career provides me with opportunities to update my skills.	Chin et al. (2022)

Construct	Item	Statement	Source
Career Sustainability – Integrativeness	CSREN_2	My career allows me to reassess my strengths and weaknesses.	Chin et al. (2022)
	CSREN_3	My career offers opportunities to rebrand myself professionally.	
	CSINT_1	My career enables me to integrate information obtained from different sources.	
	CSINT_2	My current role helps me to combine diverse knowledge and skills.	
	CSINT_3	I often connect different experiences to develop new career perspectives.	

Note: The flexibility dimension was removed from the final model due to insufficient reliability, and therefore the items are not included.

Appendix B. Cross-Loadings of Measurement Items

To further support the assessment of discriminant validity, Appendix B presents the cross-loadings of all measurement items on the model constructs, demonstrating that each item loads more strongly on its intended construct than on any other.

Table B1. Cross-Loadings of Measurement Items on All Constructs

Cross loadings	Career Satisfaction	Career Turnover Intentions	Integrativeness	Organizational Turnover Intentions	Renewability	Resourcefulness	Well-being
CARTI_4	-0.107	0.908	-0.174	0.361	-0.241	-0.324	-0.185
CARTI_5	-0.117	0.855	-0.169	0.379	-0.236	-0.269	-0.090
CARTI_6	-0.190	0.916	-0.198	0.301	-0.294	-0.367	-0.161
CSAT_1	0.845	-0.129	0.281	-0.216	0.279	0.504	0.352
CSAT_2	0.862	-0.133	0.263	-0.153	0.343	0.513	0.424
CSAT_3	0.759	-0.129	0.167	-0.139	0.264	0.496	0.387
CSAT_4	0.819	-0.099	0.229	-0.173	0.364	0.471	0.271
CSAT_5	0.788	-0.154	0.297	-0.103	0.456	0.413	0.298
CSINT_10	0.162	-0.200	0.870	-0.125	0.562	0.364	0.271
CSINT_11	0.253	-0.122	0.882	-0.086	0.508	0.311	0.202
CSINT_12	0.350	-0.197	0.870	-0.094	0.633	0.400	0.316
CSREN_7	0.414	-0.307	0.541	-0.115	0.894	0.462	0.323
CSREN_8	0.329	-0.227	0.510	-0.133	0.858	0.413	0.328
CSREN_9	0.235	-0.131	0.604	-0.005	0.642	0.298	0.202
CSRES_1	0.286	-0.194	0.346	-0.215	0.310	0.657	0.347
CSRES_2	0.532	-0.304	0.317	-0.305	0.384	0.851	0.452
CSRES_3	0.543	-0.344	0.352	-0.233	0.474	0.865	0.462

Cross loadings

	Career Satisfaction	Career Turnover Intentions	Integrativeness	Organizational Turnover Intentions	Renewability	Resourcefulness	Well-being
ORGTI_1	-0.183	0.161	-0.074	0.874	-0.073	-0.231	-0.117
ORGTI_2	-0.203	0.230	-0.105	0.911	-0.084	-0.266	-0.111
ORGTI_3	-0.116	0.552	-0.114	0.788	-0.138	-0.305	-0.136
SWL_1	0.374	-0.143	0.273	-0.120	0.346	0.486	0.821
SWL_2	0.287	-0.140	0.242	-0.140	0.289	0.416	0.738
SWL_3	0.250	-0.096	0.210	-0.133	0.273	0.386	0.817
SWL_4	0.268	-0.104	0.241	-0.043	0.183	0.292	0.667
SWL_5	0.372	-0.106	0.121	-0.045	0.149	0.276	0.497

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