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The Dark Side of Projectification: A Systematic Literature Review and Research Agenda on the Negative Aspects of Project Work and their Consequences for Individual Project Workers

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Abstract

Purpose – Project work usually has a positive connotation and is considered innovative and modern. However, many project workers suffer from chronic stress, work overload, and burnout. This study aims to integrate the determinants of the negative aspects of project work and their implications for individuals involved in projects.

Design/methodology/approach – A systematic review was used to analyze 290 papers from various disciplines to identify the most used theories, determinants of the negative aspects of project work, and the consequences of these aspects for project participants' work-related and overall well-being.

Findings – Based on the findings of the review, this paper develops a multi-level framework that includes determinants at the levels of society, organizations, projects, and individuals and discusses opportunities for further research. The findings show that socio-psychological theories and occupational health theories are the dominant theories used in research. The most frequently studied individual outcomes are affective symptoms and work-related outcomes. Detrimental individual outcomes are mostly associated with psychosocial work factors.

Originality/value – The study contributes to the literature by providing a comprehensive review of research on the negative aspects of project work and their implications for project workers. The multi-level framework can serve as a guide for future research and provide important insights for practitioners.

Keywords: Project work, Project worker, Personnel, Well-being, Burnout, Stress, Performance

Paper type: Research paper

1. Introduction

Projectification describes the increasing use of projects and its "destabilizing effects on permanent logics of the firm such as task definitions, hierarchic regulations, carrier management, functions, and suppliers relations" (Midler, 1995, p. 363). Projectification impacts both the economy and society (Maylor et al., 2006; Lundin *et al.,* 2015; Henning and Wald, 2019), as projectification can drive individuals to embrace project work, run their personal lives as a project, and view themselves and others as projects (Berglund *et al.,* 2020). Firms use projects to organize work to enhance organizational performance, innovativeness, and competitiveness (Bakker, 2010; Spanuth and Wald, 2017).

The increase in projectification (Schoper *et al.,* 2018) has led to a significant demand for highly skilled and experienced project personnel (Crawford *et al.,* 2013; Packendorff and Lindgren, 2014). For individual project workers, projectification corresponds to greater uncertainty and new career paths (Lloyd-Walker *et al.,* 2018). The project workforce must be highly agile, flexible, and efficient, as many project workers (temporarily) leave their functional unit roles to adopt a project work role and vice versa (Dube, 2014). Project work can be engaging and inspiring, but it also involves tight deadlines, intense pressure on individuals (Gällstedt, 2003), and higher workloads that may even pose risks to the health and well-being of project workers (Palm and Lindahl, 2015; Zika-Viktorsson *et al.,* 2006). Empirical research has shown that project participants are exposed to multiple challenges and paradoxes, which may lead to counterproductive outcomes such as job dissatisfaction, anxiety, and frustration (Dube, 2014). Project work can also contribute to burnout, health problems, and turnover intentions, among other detrimental consequences (Cicmil *et al.,* 2016; Pinto *et al.,* 2014; Yang *et al.,* 2017).

Although project studies have begun shifting focus from more technical to people-oriented aspects (Shurrab *et al.,* 2018), research adopting individual workers as the unit of analysis remains relatively scarce (Geraldi and Söderlund, 2018). In particular, analyses of the negative aspects of project work for individuals are

scattered across several fields of study, including operations and technology management, organization studies, project management, and information management, and thus are published in a variety of journals from different disciplines. Although Darling and Whitty (2020) highlight the impact of stressors on the project workforce's physical and mental health in a recent review of stressors in project work, no review has synthesized and integrated the diverse set of determinants of the negative aspects of project work and their manifold implications for the workforce. This dispersion of research in the field hinders the accumulation of knowledge and the progress of research. The present paper reports the results of a systematic literature review of the current state of research on the negative aspects of project work at the individual level. The review is guided by the following three questions:

1. What negative aspects of project work and their consequences for project workers and managers have been addressed in prior studies?
2. What are the predominant theories mentioned in the reviewed studies?
3. What potential directions should future research in this area take?

A comprehensive review of research on the negative aspects of project work and their implications for project workers is conducted, and the findings from diverse disciplines are published in various publication outlets are synthesized. Ultimately, the current body of knowledge is summarized in a multi-level framework that can serve as a guide for future research.

This review is organized as follows. The next section describes the methodology. This is followed by the presentation of the descriptive and thematic findings, which are then used to develop a research framework that integrates the different research streams. Finally, emerging trends, future research directions, and limitations are explained.

2. Methodology

A systematic review was performed following the three-stage approach suggested by Tranfield *et al.* (2003), as shown in Figure 1. First, the overall search strategy, keywords, and research objectives were defined. Next, a systematic review process using an approach permitting replication was performed. Accordingly, detailed information about the assembled data was collected, analyzed, and synthesized to permit an explicit understanding of the research findings. In the final stage, the research findings were related to ongoing conversations in the academic literature.

Figure 1. Flow diagram of the systematic review

Establishing the Research Objectives:
- Identify the negative aspects of project work and its implications for individuals involved in projects
- Identify the predominated theories mentioned/used in the reviewed empirical studies
- Identified the potential directions for further research in this area

Setting the Boundary

Select electronic search in databases:
- ISI Web of Knowledge
- Scopus
- Business Source Complete

Select Search Terms:
((projectification OR project* OR "project work" OR "project-based work" OR "project*based work*" OR "temporary organi*ation" OR "program* work" OR "project organi*ing" OR "project management discourse" OR "project society" OR "project workplace" OR "project setting" OR "project aspects" OR "project consequences" OR "project impact*" OR "project practices")) AND (("individual*level " OR "micro*level" OR "project* worker*" OR "project* manager*" OR "project personnel" OR "project staff" or "project workforce" OR "project employee*" OR "project participant*" OR "project labo*" OR "project member" OR "project actor*" OR "project co-worker")) NOT (team).

Filter results by including only:
- Published in peer-reviewed academic journals
- Published in English
- Time frame: no bottom limited
- Research community: no limit

Screening and selecting the literature

Applying the Inclusion Criteria:
- The article was peer reviewed and must be written in English
- In terms of publication date: no bottom limited was construed, with articles considered up to the date of writing (December 2020), including articles in press.
- The article discusses projectification project management and/or project work processes, realities, challenges, tensions, positive and negative aspects, trends
- The focus of the article is on the implications for the individual project participants
- Any form of downside, negative consequences and outcomes for human beings

Applying the exclusion criteria:
- The article focuses on disabled employees
- The article focuses on project team performance, and/or project success and/or firm performance
- Articles with no full text available
- Books, monographs, book chapters, conference proceeding, editorials, commentary essays, thesis or dissertations

Manual cross reference check

Reporting and dissemination

Final sample:
- 290 papers selected for final review

Create data extraction
- Microsoft Excel

Descriptive and thematic analyses
- NVivo software

Reporting

2.1. Search strategy

To identify relevant sources, the search terms shown in Figure 1 were used with three databases, i.e., ISI Web of Science, EBSCOhost – Business Source Complete, and Scopus, for all years until 2020 to ensure the inclusion of articles published in recent decades. Combinations of the search terms were used to search titles, keywords, and/or abstracts of articles. The search was limited to articles published in the English language in peer-reviewed academic journals. Subject areas were not limited. In terms of publication dates, no limit was set. The sample includes publications from 1973 to 2020.

The initial search yielded a total of 18982 contributions. At this stage, the titles, abstracts, and in some cases, the full text of the identified papers were read, and only those studies discussing projectification, project organizing, project work, and individuals involved in project work were retained, resulting in 2088 papers. The selected studies were retrieved and stored in a local repository for further analysis. Subsequent deletion of duplicates reduced the number of articles for further filtering to 970. After reading through each of the 970 publications, another 697 were excluded due to a lack of topical fit, e.g., studies without a focus on the individual level or studies focusing on project team outcomes. In addition, following Denyer and Tranfield (2009), the systematic literature search procedure was strengthened by reviewing the references of the core studies to identify additional papers that were not returned by our database search, which generated another 46 relevant contributions for inclusion. Finally, a total of 290 articles were included in the analysis.

2.2. Data extraction

Data were extracted by in-depth reading of the full-text versions of all papers in the sample. An Excel spreadsheet was used to create a database to ensure that all contributions from the sample were thoroughly analyzed. To facilitate the analysis of the vast amount of textual data, Denyer and Tranfield's (2009) guidelines for extracting data were followed to collect general information about the article (e.g.,

title, author, year, journal) and features such as the main objective, research context, theoretical foundations, methodology, sample size, and major findings. Additionally, all items identified as determinants of the negative aspects of project work and outcome variables for project participants were extracted, clustered, and preliminarily coded. The full description of the extraction form can be found in Appendix A. During the data extraction process, each study was classified according to the main topics that emerged from the literature.

2.3 Data analysis and synthesis

The text material was qualitatively analyzed to obtain a deeper understanding of the emerging categories and link the categories, sub-categories, and sub-(sub-)categories. The coding evolved inductively as the analysis progressed. After several iterations, the categories were refined. The NVivo tool was used to further analyze and systematically code the material, and the inductive technique of Corbin and Strauss (1990) was used to identify the most popular research categories, as suggested by Wolfswinkel *et al.* (2013). In reviewing the identified themes/categories and patterns, the analysis captured potential determinants (e.g., project work-related stressors) and individual outcomes (e.g., work-life imbalance). Based on the research questions and identified determinants, as well as the explanations provided, a list of factors affecting dimensions of project participants' overall well-being at work (e.g., affective state, cognitive functioning) was created. Specific sub-(sub-)categories were assigned to each research paper and then synthesized into a more generic category. This was done in three stages: First, during the thematic analysis, open coding was performed to identify, name, categorize, and describe the events/actions/interactions found in the data (the final pool of articles). Many papers shared the same sub-category. For example, of the 290 articles, ten studied project work-related factors (e.g., Bowen *et al.,* 2014; Pinto *et al.,* 2014), and those ten articles shared the same sub-categories, namely, job demand and job resources problems. Second, sub-categories were identified following an axial coding approach, which involved the gathering of the open codes into respective axial codes (concepts). For example, the sub-(sub-)categories of "role ambiguity," "role conflict," "role overload," and

"role stress" were grouped to form a sub-category called "role problems." Third, the sub-categories (axial codes) were compared based on their similarities and differences. For example, the sub-categories labeled "organizational structure and climate," "organizational culture," "organizational justice," "hybrid systems," "HRM practices," and "contractual type, remuneration, and benefits" were considered similar, as these sub-categories highlight the complexities of the organizational context that cause tensions and stress for people involved in projects. Thus, this group of sub-categories formed a category labeled "organizational factors." This process generated a total of four core categories: environmental factors, organizational factors, project factors, and individual factors. Lastly, the review findings were classified according to the four main categories as well as the sub-categories within each of these categories generated through the thematic analysis (see Appendix for the analysis of the data moving from first-order concepts to themes and dimensions). The identified core categories and sub-categories were consistent with the taxonomy for the antecedents of turnover intention among project engineers developed by Ghapanchi and Aurum (2011). Subsequently, a classification framework comprising all identified elements was created.

3. Descriptive findings

3.1. Temporal development

The negative aspects of project work and the implications of project work for individual project workers received only minor scrutiny in the early 1990s. Publications increased slightly in the early 2000s when up to five papers were published yearly, followed by more significant proliferation in the last decade. The largest share (approximately 85%) of the papers were published between 2010 and 2020.

3.2. Publication outlets

Research on the negative aspects of project work has been published in diverse outlets covering a broad range of disciplines (see Table 1). Among them, *International Journal of Project Management* (66), *International Journal of Managing Projects in Business* (23), *Project Management Journal* (19), *Construction Management and Economics* (13), and *Engineering Construction and Architectural Management* (13) are top-ranked. The remaining papers were published in various journals in management and organization research and in areas such as organizational psychology and information systems (IS). Due to the interdisciplinary nature of projects, research on the negative aspects of project work has found a home in various outlets.

Table 1. Publication distribution among the most popular journals

Journals	Number of articles
International Journal of Project Management	66
International Journal of Managing Projects in Business	23
Project Management Journal	19
Construction Management and Economics	13
Engineering, Construction and Architectural Management	13
International Journal of Human Resource Management	8
Human Relations	8
Journal of Construction, Engineering, and Management	6
IEEE Transaction on Engineering and Management	5
New Technology Work and Employment	5
International Journal of Environmental Research and Public Health	5
International Journal of Construction Management	4
Organization	4
Journal of Management Studies	4
Scandinavian Journal of Management	4

3.3. Research methodology and data

Of the 290 articles, the majority are empirical (245) and use quantitative methods (118), mainly cross-sectional survey data. Many empirical papers also use qualitative methods (100), including case studies, interviews, focus groups, secondary data, and observations. Only 25 publications use mixed methods, typically in the form of an online survey with follow-up interviews, and an experimental or quasi-experimental design is used in only one study each. A small

number of empirical studies use other approaches, such as action research (two), network analysis (two), grounded theory (five), and ethnographic research (five). Finally, purely theoretical/conceptual contributions are limited to 44 articles.

3.4. Industry and geographical focus

Empirical research has been conducted in 44 countries, with most studies focusing on European countries and North America. Furthermore, of the 245 empirical papers based on primary data, 153 have a specific industry focus, and 70 use multi-industry samples.

3.5. Theories employed

Sociological and psychological theories (e.g., social exchange theory, social identity theory, occupational stress theory) are the predominant theories in our sample, followed by management and organization theories (see Table 2). Only 98 empirical articles explicitly draw on sociopsychological and management theories/models. With respect to individual theories and models, the job demands-resources (JD-R) model is the most frequently used theoretical framework for studying how workplace stressors affect employees' attitudes, behaviors, and well-being and for predicting the experience of burnout. This model provides an essential base for research on the negative aspects of project work, as job demand and job resources are considered critical elements for understanding the contemporary working conditions that cause occupational stress and consequently negatively affect employees' work performance, health, and well-being. For example, empirical work by Yang *et al.* (2017) draws on the JD-R model and finds that job stress significantly aggravates the level of job burnout and that the primary stressors are the stakeholder's relationship management and management systems. Accordingly, scholars have used the JD-R model to argue that performance and health outcomes often result from constant exposure to adverse project work-related factors such as high workloads, insufficient resources, and lack of support from managers/supervisors.

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Leadership theories are also frequently used to study how leadership (e.g., leadership styles) influences employees' work outcomes and well-being. For example, empirical work by Ding *et al.* (2017) draws on two theoretical frameworks—leadership theory and social identity theory—and finds that transformational leadership is positively related to an employee's work engagement and negatively related to turnover intentions.

Career theories are also frequently employed to study project-based career choices, attitudes, trajectories, and challenges. For example, Lloyd-Walker et al. (2016) use social cognitive career theory to explore the reality of careers in project management (PM) and find that those who choose to pursue a career in PM have appropriate personal characteristics and sufficiently high levels of self-efficacy to cope effectively with the uncertainty inherent in projects and project-based employment.

Finally, organization and management theories are used to understand the potential influence of organizational mechanisms (e.g., citizenship behavior) on employees' work behaviors. For example, Lindgren and Packendorff (2006) combine project management theory with the management of gender systems theory to study how project work reproduces both masculine work practices (e.g., rationality, control) and feminine work practices (e.g., the rhetoric of the organizational context and expectations), although the tendency to reproduce masculine work practices is stronger.

Table 2. Most prevalent theories

Topic covered	Theory/Model	(Sample) Study
Organizational mechanisms	Theory of positional competitions, organizational support theory, exchange theory, organization theory, organizational role theory	Peticca-Harris *et al.,* (2015); Borg and Soderlund, 2015; Braun *et al.,* (2013); Ekman, (2015); Ekrot *et al.,* (2018); Kabiri and Hughes, 2018; Saunders *et al.,* (2016)
Gender inequalities	Social category theory, social role theory, gender role theory, role congruency theory, path-goal theory, Theoretical framework of inequality regimes, goal theory	Henderson *et al.,* (2013); Olofsdotter and Randevag, (2016); Pinto, *et al.,* (2015, 2017); Sieben *et al.,* (2016)
Leadership style and competencies	Theory of leadership, Situational Leadership, Coaching leadership theory, transformational leadership, leader exchange theory, path-goal leadership styles, the great man theory	Berg and Karlsen, (2013); Ding *et al.*, (2017); Famakin and Abisuga, (2016); Jiang, *et al.*, (2017); Kerdngern and Thanitbenjasith, (2017); Leban and Zulauf, (2004); Muller and Turner, (2010)
Project-based careers	Social capital theory, Social cognitive career theory, boundaryless career theory, career development theory, protean career theory, traditional career theory, capital career theory, theory of career motivation	Akkermans, *et al.,* (2019); Baugh and Roberts, (1994); Cha *et al.,* (2009); Crawford *et al.,* (2013); Lloyd-Walker *et al.,* (2018); Lloyd-Walker *et al.,* (2016); Skilton and Bravo, (2008); Welch and Welch, (2015)
Role problems	Organizational role theory, role theory, side bet theory of work commitment	Dube, (2014); Kabiri and Hughes, (2018); Wang and Armstrong, (2004)
Engagement	Role conflict theory, social identity theory, identity theory, job design theory, theories of culture	Dwivedula and Bredillet, (2010b); McKevitt *et al.,* (2017); Robertson & Swan, (2003); Wang et al., (2017); Webber, (2011)
Workplace stressors	Stress theories, transactional stress theory, and the transaction stress model.	Ford, (2014); Ng *et al.,* (2005); Raetze *et al.,* (2018); Zika-Viktorsson *et al.,* (2006)
Work-family conflicts	The role theory, the social exchange theory, conservation resources Theory	Lingard and Francis, (2004); Wu *et al.*, (2018); Xia *et al.,* (2018); Zheng and Wu, (2018)
Stress Burnout Health issues	JD-C Model, JD-C-S Model, JD-R Model, occupational stress theory, boundary theory, psychometric theory	Andreassen *et al.,* (2018); Bowen *et al.,* (2013); Bowen *et al.,* (2014); Bowen *et al.,* (2018); Cattell *et al.,* (2016); Chiocchio *et al.,* (2010); Pinto *et al.,* (2014); Singh *et al.,* (2012); Turner and Lingard, (2016b); Yang *et al.,* (2017)
Commitment	Social identity theory, role conflict theory, job design theory, theories of culture, site bet theory	Dwivedula and Bredillet, (2010b); McKevitt *et al.,* (2017); Robertson and Swan, (2003); Wang *et al.,* (2017);

<div align="right">(continued)</div>

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	of work commitment, social exchange theory	Wang and Armstrong, (2004); Webber, (2011)
Job performance	Goal-setting theory, inverted U theory, inverted U-shape model, job performance theories	Djebarni, (1996); Leung *et al.,* (2008); Senaratne & Rasagopalasingam, (2017); Omorede *et al.,* (2013)
Motivations	Motivational theories, self-determination theory, social learning theory, learning theories, human capital theories	Dwivedula and Bredillet, (2010a); Fisher, (2011); Holzle, (2010); Hu *et al.,* (2012); Savelsbergh *et al.,* (2016); Schmid and Adams, (2008); Shurrab *et al.,* (2018)
Soft skills	Emotion theory, affective theory, theory of emotional Intelligence, emotional intelligence model, basic emotions theory	Clarke, (2010); Davis, (2011); Rezvani *et al.,* (2016); Sunindijo *et al.,* (2007)

In summary, existing research focuses on more practical rather than theoretical implications (Geraldi and Söderlund, 2018). Many studies lack a clearly pronounced theoretical contribution, and only a few organization and management theories are referenced.

4. Thematic findings

4.1. Environmental factors

Environmental factors include societal-level factors that affect an organization and its members, such as a country's culture, socioeconomic differences, legal and political systems, and formal (e.g., Ekstedt, 2019; Jalocha, 2019; Lundin, 2016) and informal institutions (Ghapanchi and Aurum, 2011). Societal-level factors play an important role in shaping organizational policies and procedures. Prior research examines projectification as the result of various types of mechanisms at the workplace that continuously challenge and transform a set of institutions (e.g., laws and mindsets) (Lundin, 2016). Factors external to the workplace (e.g., work –family conflicts (WFCs)) also influence project personnel's well-being (Liu and Low, 2011). Empirical research shows that project workers experiencing WFC are at greater risk of burnout (Singh *et al.,* 2012). The national context, industry characteristics, formal institutions (e.g., employment regime), and family and friends are subcategories of environmental factors (see Table 3 for examples). As

illustrated in Figure 2, environmental factors are studied as both determinants and moderators.

Walker and Lloyd-Walker (2019) point out that the proliferation of business and government project work is leading to more job and career opportunities for project professionals. However, success is linked to always being available, flexible, and connected while sacrificing lifelong plans, stable conditions, and social predictability (Chiapello and Fairclough, 2002). Thus, projectification affects not only how people work in projects but also how they live their lives while working in projects (Lindgren and Packendorff, 2006).

4.2. Organizational factors

Organizational factors relate to the organizational context of projects that affect management practices (Maylor *et al.,* 2006) and employees. Within this category, five interrelated sub-categories can be identified: (1) organizational structure and climate (e.g., complexities, ethical dilemmas), (2) organizational culture (e.g., parallel cultures), (3) contractual, remuneration and benefits, (4) human resources management (HRM) practices (e.g., staffing, appraisal systems), and (5) control mechanisms (e.g., discursive practices). Table 3 provides examples of the organizational factors and their implications.

The literature shows that organizational stressors affect projects and their members. There is empirical support for paradoxical tensions and practices (Gaim *et al.,* 2019), increased organizational professionalization (Legault and Chasserio, 2012), competing organizational logics and resources constraints (Arvidsson, 2009), organizational dualities (Hodgson *et al.,* 2011), bureaucracy and different views of decision-makers (Ng *et al.,* 2005), job uncertainty (Rowlands and Handy, 2012), management systems (Yang *et al.,* 2017), and organization structures and policies that do not consider employees' well-being (Senaratne & Rasagopalasingam, 2017; Naoum *et al.,* 2018) as major contextual roots of psychological distress in project work. Therefore, organizational support is crucial for a project manager's well-being and career path (Ekrot *et al.,* 2018).

Empirical research also indicates that organizations extract long hours from employees through the process of neo-normative control, that is, by instilling in employees a profound sense of personal commitment to the goals and values of the organization and a sense of autonomy over their selves, careers, and lives (Ekman, 2015). However, project professionals often do not take advantage of the benefits of such high job autonomy (Osnowitz and Henson, 2016) and instead prioritize work over their health (Asquin *et al.,* 2010).

Table 3. Illustration of multi-level determinants and implications

Environmental factors and implications	
National context	Projectification has influenced and transformed society into a project society (Lundin, 2016).
Industry characteristics	The construction industry is a high risk for work stress associated with excessive workloads, timed constraints, and deadlines (Leung *et al.,* 2008).
Formal institutions	(…) institutions such as lawmakers of labor and education systems are supporting, regulating, and preparing for projectified work life (Ekstedt, 2019).
Family and friends' support/issues	(…) Non-work-related support was found to be more significant in alleviating psychological strain (Love and Edwards, 2005)
Organizational factors and implications	
Organizational structure and climate	A career developing environment, poor organizational structure and role dualities affect both psychological stress and performance (Naoum et al., 2018). Work environments produce emotions such as angry in attaining the desirable outcomes (Lindebaum and Fielden, 2011).
Organizational culture	Many problems of project management are due to the organizational culture rather than inherent in project work (Wearne, 2014).
Control mechanisms	Projectified organizations are using inexpensive behavior control systems based on the rhetoric of professionalization by promoting an entrepreneurial like commitment behaviors –self-discipline, self-directed, self-motivating, self-control, self-censorship, self-realization, and self-exploitation (Legault and Chasserio, 2012).
HRM practices	Who are satisfied with their firm's HRM practices and job rewards also have higher job satisfaction (Ling *et al.,* 2018).
Contract/ Remuneration and benefits	Short-term contracts increase the odd of depression and anxiety (D' Souza *et al.,* 2003).
Project factors and implications	
Job demand and resource issues	The lack of opportunities for recuperation, inadequate routines, limited time resources, and many simultaneous projects cause project overload, in turn, psychological stress reactions, decreased competence development, and deviations from the schedule (Zika-Viktorsson *et al.,* 2006).
Role problems	Project workers experiencing role ambiguity, role conflicts (…), are at greater risk of burnout (Singh *et al.,* 2012).
Project manager's leadership style	The project manager's behaviors and leadership styles can influence the turnover intention of the project workers (Kerdngern and Thanitbenjasith, 2017).
Teamwork issues	The most active stressor is workgroup cooperation (Naoum *et al.,* 2018).
Project-(sub) culture	A project culture based on the acceptance of ambiguity promoted by the development of highly committed and effective workers who can sustain multiple identities and flexible forms of project working overtime (Robertson and Swan, 2003).
Individual factors and implications	
Demographic characteristics	Project workforce tenure was found to increase job satisfaction and performance but also may increase job conflicts with supervisors (Baugh and Roberts, 1994).
Human capital	Human capital and social networks are critical for project-based career progress (DeFillippi and Arthur, 1998).

(*continued*)

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Career orientation	Those who continue with project-based roles value change, flexibility, variety, and take responsibility for their own career progression (Lloyd-Walker *et al.,* 2018).
Psychological capital	(…) resilience helps reduce stress and cope with it (Berg and Karlsen, 2013).
Personality traits	Type A personality has a significant negative relationship with both psychological and physiological strain among project workers (Weiss, 1983).
Copying style	Project managers apply more active coping and planning strategies when dealing with stressful situations (Aitken and Crawford, 2007).
Motivations	Project managers are motivated by compensation, personal development, and empowerment (Shurrab *et al.,* 2018).
Emotional states	Project workers tend to internalize negative emotions and externalized feelings of certainty and confidence (Lindgren *et al.,* 2014).
Work-identities	Work identities are influenced by both the working conditions and normative beliefs of the ideal self and what they are capable of achieving (Styhre, 2012).
Perceived Job-related concerns	(…) physical and psychological risk problems caused by job insecurity (Turner and Lingard, 2016a).
Psychological contract	Project workers experiencing psychological contract violation are a greater risk of job burnout (Singh *et al.,* 2012).
Mindset	Paradoxical tensions require paradoxical mindsets (…), so project members do not fall to defensive responses (Gaim *et al.,* 2019).

4.3. Project factors

Project factors include project-related aspects impacting project participants' work outcomes (Leung et al., 2008) and health (Darling and Whitty, 2020). Within project factors, seven interrelated determinants can be recognized: (1) job demand and job resource issues, (2) role problems, (3) teamwork issues (e.g., conflicts, turnovers), (4) project manager's leadership style and behavior, (5) project (sub)cultures (e.g., a culture of long hours), (6) past episodic events (e.g., project failure), and (7) work-home interference (e.g., constant connectivity). Table 3 illustrates the project factors and their implications. Within this category, job demand and job resource issues, the project manager's skills and competencies, leadership style, and behaviors are the most frequently studied, followed by occupational stress.

Research in this category emphasizes project stressors that affect project participants. Project management can be a complex political and social process (Hodgson and Cicmil, 2008). The review identified the following determinants of

the negative aspects of project work: First, projects are carried out by human beings with potential conflicts of interest and difficult personalities (Clegg and Courpasson, 2004). Second, projects are driven by deadline and gate models, which can give rise to hypocrite and malfunction in communication (Palm and Lindahl, 2015). In addition, leading people of different backgrounds (e.g., multidisciplinary professionals) is challenging (Matthews et al., 2018), and a poor project leader and a perceived lack of appreciation are major factors encouraging turnover (Longenecker and Scazzero, 2003). Lastly, the project workforce can experience emotional dissonance, which is another source of stress (Rutner, 2008). Hence, project work can create conditions that are difficult to cope with, justify, and control, despite the grand promise of project management to deliver reasonable, rational, and controllable processes and outcomes (Cicmil *et al.,* 2016). Project participants are exposed to frustrating processes and stress created by conflicts, overload, and unfavorable working conditions (Havermans *et al.,* 2019).
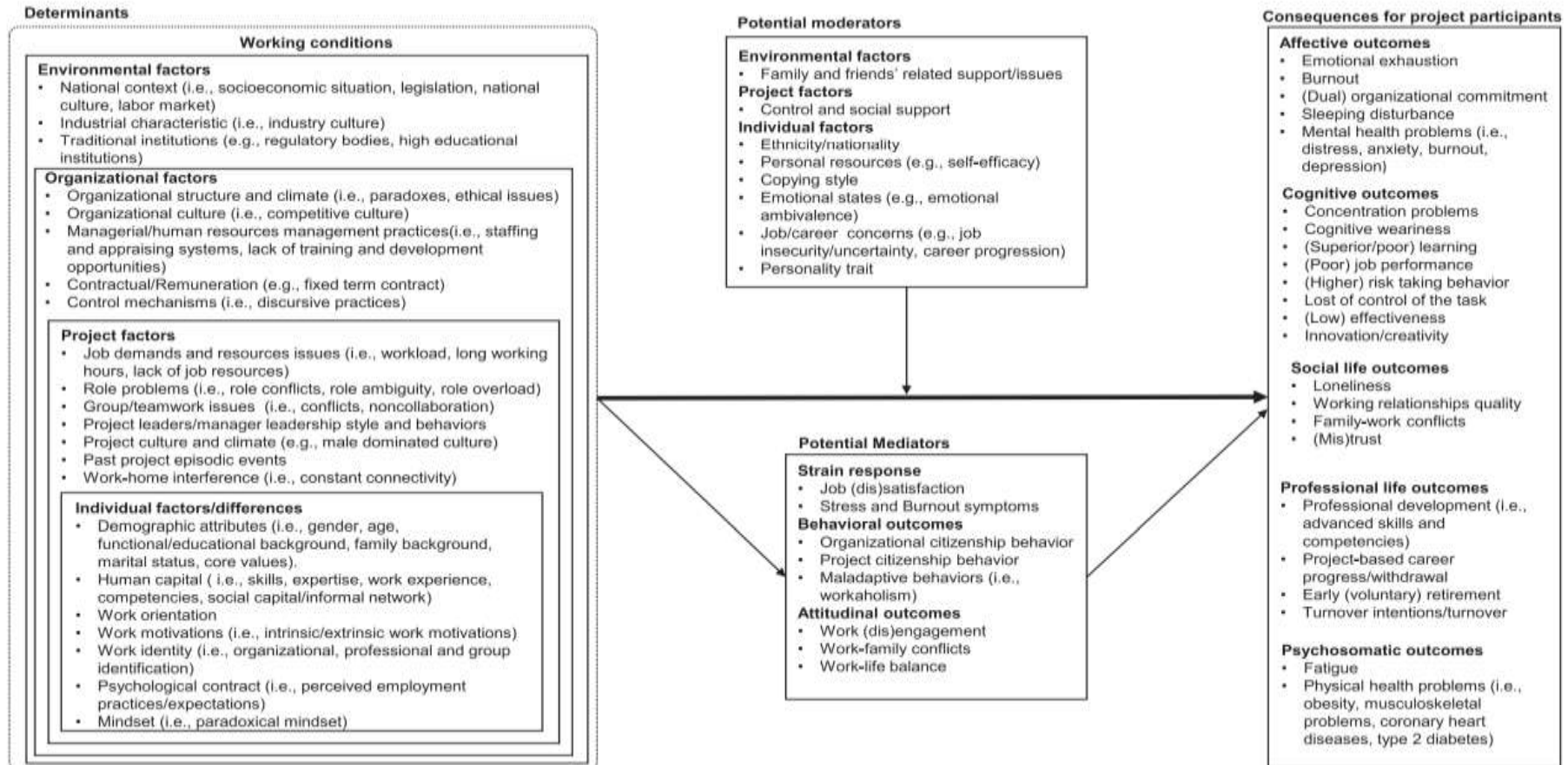
4.4. Individual factors

Individual factors concern individual attributes and psychological factors (e.g., emotional processes) that play a role in the development of job-related strain responses (e.g., job dissatisfaction) under the influence of high job demands (Demerouti and Bakker, 2011). Within the individual factors, twelve interrelated sub-categories can be recognized: (1) demographic characteristics, (2) human capital (e.g., competence), (3) career orientation, (4) personal resources (e.g., self-efficacy), (5) personality traits, (6) coping style (problem-focused, emotion-focused orientation), (7) motivations, (8) emotional states, (9) work identities (e.g., professional identification), (10) perceived job concerns (e.g., job insecurity), (11) mindset (e.g., paradoxical mindset), and (12) psychological contract (e.g., perceptions/expectations of employment practices). Table 3 outlines the individual factors identified in this study. The most frequently studied topics in this category are work motivation, gender differences/challenges, and coping strategies.

Research in this category explores individual factors, and different combinations of personality traits, emotions, and perceptions of work and organization processes that cause people to react differently to stressors (e.g., El Baroudi *et al.,* 2019). For example, justice perceptions affect the emotional states and behavioral responses of project workers, such as venting and engagement (Chaudhry *et al.,* 2020) and project citizenship behaviors (Lim and Loosemore, 2017). Empirical evidence shows that age and level of education influence the way people cope with stress (Haynes and Love, 2004), and lack of competence or mismatch of competence may contribute to project overload (Gustavsson, 2016) and psychological distress (Turner & Lingard, 2016a, b).

5. A multi-factor and multi-level model of the negative aspects of project work

The proposed framework integrates the principal dimensions and respective sub-categories in a model that captures the identified determinants of the negative aspects of project work and their consequences for individuals (see Figure 2). In contrast to consequences, where the focus has been on the individual level, literature has identified determinants of negative aspects at different levels. Accordingly, the proposed framework includes several interconnected levels as determinants: macro (environmental/societal/country/industry), meso (organization and project), and micro (individuals). Additionally, the framework highlights potential mediators and moderators that may influence the relationships between the negative aspects of project work and individual outcomes. The framework and the following discussion provide an answer to the first research question of this paper.

Figure 2. Model of the negative aspects of project work and its consequences

Determinants

Working conditions

Environmental factors
- National context (i.e., socioeconomic situation, legislation, national culture, labor market)
- Industrial characteristic (i.e., industry culture)
- Traditional institutions (e.g., regulatory bodies, high educational institutions)

Organizational factors
- Organizational structure and climate (i.e., paradoxes, ethical issues)
- Organizational culture (i.e., competitive culture)
- Managerial/human resources management practices(i.e., staffing and appraising systems, lack of training and development opportunities)
- Contractual/Remuneration (e.g., fixed term contract)
- Control mechanisms (i.e., discursive practices)

Project factors
- Job demands and resources issues (i.e., workload, long working hours, lack of job resources)
- Role problems (i.e., role conflicts, role ambiguity, role overload)
- Group/teamwork issues (i.e., conflicts, noncollaboration)
- Project leaders/manager leadership style and behaviors
- Project culture and climate (e.g., male dominated culture)
- Past project episodic events
- Work-home interference (i.e., constant connectivity)

Individual factors/differences
- Demographic attributes (i.e., gender, age, functional/educational background, family background, marital status, core values).
- Human capital (i.e., skills, expertise, work experience, competencies, social capital/informal network)
- Work orientation
- Work motivations (i.e., intrinsic/extrinsic work motivations)
- Work identity (i.e., organizational, professional and group identification)
- Psychological contract (i.e., perceived employment practices/expectations)
- Mindset (i.e., paradoxical mindset)

Potential moderators

Environmental factors
- Family and friends' related support/issues

Project factors
- Control and social support

Individual factors
- Ethnicity/nationality
- Personal resources (e.g., self-efficacy)
- Coping style
- Emotional states (e.g., emotional ambivalence)
- Job/career concerns (e.g., job insecurity/uncertainty, career progression)
- Personality trait

Potential Mediators

Strain response
- Job (dis)satisfaction
- Stress and Burnout symptoms

Behavioral outcomes
- Organizational citizenship behavior
- Project citizenship behavior
- Maladaptive behaviors (i.e., workaholism)

Attitudinal outcomes
- Work (dis)engagement
- Work-family conflicts
- Work-life balance

Consequences for project participants

Affective outcomes
- Emotional exhaustion
- Burnout
- (Dual) organizational commitment
- Sleeping disturbance
- Mental health problems (i.e., distress, anxiety, burnout, depression)

Cognitive outcomes
- Concentration problems
- Cognitive weariness
- (Superior/poor) learning
- (Poor) job performance
- (Higher) risk taking behavior
- Lost of control of the task
- (Low) effectiveness
- Innovation/creativity

Social life outcomes
- Loneliness
- Working relationships quality
- Family-work conflicts
- (Mis)trust

Professional life outcomes
- Professional development (i.e., advanced skills and competencies)
- Project-based career progress/withdrawal
- Early (voluntary) retirement
- Turnover intentions/turnover

Psychosomatic outcomes
- Fatigue
- Physical health problems (i.e., obesity, musculoskeletal problems, coronary heart diseases, type 2 diabetes)

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5.1. Macro level

Environmental factors, which consist of macro-level factors such as socioeconomic, political, institutional, and cultural context, influence all other factors at all levels. As Ekstedt (2019, p. 275) points out, core institutions regulate, prepare, and support the diffusion of the "projectified" work life. The projectified work life includes the precarization of work (e.g., looser forms of employment contracts/financial insecurity) and segregation of labor (Cicmil *et al.,* 2016; Ekstedt, 2019; Herschberg *et al.,* 2018; Osnowitz and Henson, 2016; Simini and Sydow, 2021).

5.2. Meso level

At the meso level, organizational contextual factors affect the project and its members. For example, matrix organizations force employees to navigate between functional units and projects and expect high performance in both (Dube, 2014). In these dynamic and complex organizational environments, changes in the project due to uncertainty may occur, internal politics (e.g., hidden agendas, biased plans) may emerge, and project participants' motivation levels and efficiency may decline (Geraldi *et al.,* 2011). These dynamics can be further complicated by constant changes, unrealistic deadlines, and intense pressures (Turner *et al.,* 2008). Additionally, employees may encounter ethical issues such as gender inequalities (Olofsdotter and Rasmusson, 2016; Greer and Carden, 2021) and dishonesty (Kvalnes, 2014). The governance structure influences the way employees encounter and respond to such ethical issues (Müller *et al.,* 2014). Adverse situations, e.g., miscommunication, negatively affect project participants' engagement (Mysore *et al.,* 2021) and employee productivity (Van Tam *et al.,* 2021). Moreover, an *"ideal project-oriented company has a specific management culture expressed in the empowerment of employees, process orientation and teamwork, continuous and discontinuous organization change, customer orientation, and networking with clients and suppliers"* (Huemann *et al.,* 2007, p. 317). In this high-pressure work environment, project managers are often forced to "do more with less"; as a result, project managers engage in either high-

performance or abusive supervision behaviors (Gallagher *et al.,* 2015, p. 10). Abusive supervision behavior negatively affects employee well-being and triggers employee turnover (Gallagher *et al.,* 2015). Furthermore, project-based organizing and the normalization of temporary work create new employment relationships and changes in the design of human resources management (HRM) processes and voice behaviors (Bredin and Söderlund, 2011; Prouska and Kapsali, 2021). In project-based organizations (PBOs), HRM practices are the domain of the project manager rather than either line managers or the HRM department (Keegan *et al.,* 2012).

At the project level, job demands, job resources, teamwork issues, the project manager's leadership style, and project culture are aspects of project work that can become stressors depending on individual attributes, personal resources (e.g., self-efficacy), and context. Moreover, projects can be rife with complex and paradoxical demands due to the need for both efficiency and flexibility to navigate a complex and evolving environment (Havermans *et al.,* 2019). Even in the presence of high professionalism, it can be difficult for project managers to accomplish what is planned, as they must frequently deal with unrealistic deadlines, resource constraints, and, sometimes, a lack of stakeholder engagement (Ballesteros-Sanchez *et al.,* 2019).

An excessive workload is partially due to parallel activities that demand extensive prioritization (Hovmark and Nordqvist, 1996; Panojan *et al.,* 2019) in addition to poor planning, inadequate allocation of resources (Celkevicius and Russo, 2018), insufficient workforce, loss of control, lack of feedback (Pinto *et al.,* 2014), and constant transitions from project to project, which requires social interactions with various project participants (Patanakul *et al.,* 2016). Such situations create project overload, which is associated with stress reactions, poor job performance, and illness (Weiss, 1983; Zika-Viktorsson *et al.,* 2006; Bråthen *et al.,* 2021). Furthermore, project workers are often expected to deliver the impossible regardless of the consequences for life in general (Lindgren and Packendorff, 2006). Hence, project work exposes individuals to risks of excessive involvement and commitment, destabilization of professional identities, and precarization of project careers (Asquin *et al.,* 2010).

The leadership style and behaviors of project managers can also negatively influence the work-related outcomes of subordinates. For example, project managers can impose multiple pressures on their team members, resulting in high levels of stress and ill-being (Bouwmeester and Kok, 2018), and can emotionally manipulate the environment to their own advantage (Whitty, 2010). Furthermore, project culture can be used by managers to trigger employees' citizenship behaviors, which in turn drive success (Aronson and Lechler, 2009). However, in settings with a culture of long working hours, the demand for citizenship behavior causes job burnout (Wu *et al.,* 2018; Yip and Rowlinson, 2009) and WFCs (Xia *et al.,* 2018), which can lead to depression and sleep problems (Zhang and Bowen, 2021). These negative consequences highlight the importance of appropriate job design (manageable workloads) and manager behaviors as well as a safe psychological workplace culture to ensure sustainable and responsible treatment of employees.

5.3. Micro level

At the micro level, research has looked at individual differences, such as demographic differences, skills and competencies, personal resources, and coping orientation, that affect the way project personnel handle and cope with the adverse impact of project stressors (e.g., Bowen *et al.,* 2021; Haney and Love, 2004; Gustavsson, 2016; Henderson *et al.,* 2013; Panojan *et al.,* 2019). Women, for example, tend to experience greater emotional exhaustion than their male counterparts (Pinto *et al.,* 2014). Moreover, personal attributes shape the way in which knowledge and skills are applied to a situation, the way team members respond to group collaboration (Walker and Lloyd-Walker, 2019), and job burnout symptoms (Sun *et al.,* 2020). Motivation factors (e.g., rewards, work satisfaction) affect project workforce productivity (Van Tam *et al.,* 2021).

People who choose a project career are usually highly committed and willing to self-sacrifice; they voluntarily engage in project work on a regular basis because they cannot imagine doing or daring to do something else (Cicmil *et al.,* 2016).

Regardless, all project participants are vulnerable to stressful working conditions, which can impair work-related outcomes, health, and well-being in the long run.

5.4. Adverse effects on project workers

The review revealed a variety of negative effects on people who work in projects, especially project managers (Jugdev *et al.,* 2018), women (Olofsdotter and Rasmusson, 2016), and junior project workers (Bouwmeester and Kok, 2018). The individual outcomes are classified into seven categories in Figure 2: behavior, attitudinal, affective, cognitive, social life, professional life, and psychosomatic outcomes. Stress, for example, is a recurring factor. Stressful working conditions can affect project personnel's motivations (Gällstedt, 2003; Van Tam *et al.,* 2021), job satisfaction, performance, and work-life balance (De Silva *et al.,* 2017; Panojan *et al.,* 2019; Pirzadeh and Lingard, 2021) and, over time, turn into chronic stress, increasing the risk of poor mental health and chronic illnesses (e.g., Darling and Whitty, 2020). Other individual outcomes are loneliness, disrupted family lives, and superficial workplace relations (Lindgren and Packendorff, 2007). Projects can be "mental prisons" that often stimulate and cause stress, work-life conflicts, and social isolation (Cicmil *et al.,* 2016; Lindgren and Packendorff, 2006). The ramifications of stress are also evident in poor competence development, schedule deviations (Zika-Viktorsson *et al.,* 2006), loss of control over tasks (An *et al.,* 2019), substance abuse (Bowen et al., 2013), and mental health problems (e.g., burnout) (Sun et al., 2020; Zhang & Bowen, 2021).

5.5. Potential mediators

Multiple mediating variables that influence the relationship between project work and employee well-being have been reported. For example, workaholism mediates the relationship between work-related stressors and health outcomes (Andreassen *et al.,* 2018). Organizational citizenship behavior (OCB) mediates the relationship between the project manager's leadership style and job performance (Jiang *et al.,* 2017). Moreover, employees' work-life conflicts mediate the relationship between organizational aspects and organizational commitment (Spanuth and Wald, 2017).

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Job burnout/engagement may mediate the relationships among organizational- and project-related stressors, individual differences, and turnover/retention (Jugdev et *al.,* 2018). Lastly, work-life balance mediates the effects of work hours, work pressure, work engagement, and work-life interference on psychological well-being (Pirzadeh and Lingard, 2021).

5.6. Potential multi-level moderators

At the macro level, national culture influences the way employees understand and perceive values such as honesty and the need for trust (Padhi and Mishra, 2017) and how they handle conflicts, perceive quality, meet deadlines, and interpret the behavior of others (van Marrewijk, 2010). The review also revealed that social support from family and friends alleviates psychological stress (Love and Edwards, 2005) and reduces work/family conflicts (Zheng and Wu, 2018). At the firm level, parallel cultures may lead to frustration and greater uncertainty (Ekstedt, 2019). Furthermore, a workplace culture of long hours (Lingard *et al.,* 2012) and competition (Bowen *et al.,* 2014) can promote greater work intensification, leading individuals to overwork not only to prove their worth but to sustain employability (Osnowitz and Henson, 2016). At the project level, control, and social support serve as moderators of burnout dimensions (Pinto *et al.,* 2014). At the individual level, psychological factors such as concerns about job security impact employees' health behaviors (Turner and Lingard, 2016a). Furthermore, career calling can positively moderate the effects of role conflict and burnout (Wu *et al.,* 2019). Coping strategies such as problem-solving significantly moderate the relationships between role overload and all three dimensions of burnout, while work-related social support is a significant moderator of only the relationship between role overload and emotional exhaustion (Yip *et al.,* 2008; Bowen *et al.,* 2021). Finally, personal resources (e.g., emotional intelligence) moderate the choice between high-performance work practices and abusive supervision behaviors (Gallagher *et al.,* 2015). In a recent study, Zheng *et al.* (2021) found that emotional intelligence moderates the effects of work interference with family on emotional exhaustion.

5.7. Connecting theory to the model

Most empirical studies of the negative aspects of project work draw on theories from several disciplines in social science and psychology. Project participants can be negatively affected by external (macro level) and internal organizational (meso level) factors. For instance, the neo-institutional theory is used to explain the external environmental, legal, and political logics that trigger projectification and subsequent changes in the organization, e.g., in operations and professional practices (Jalocha, 2019). Thus, the projectification process can create paradoxical tensions for the HRM function (Keegan *et al.,* 2018). A combination of paradox theory with the Ulrich-style three-legged model is used to study employees' responses to paradoxical tensions (Keegan *et al.,* 2018). Paradoxical tensions do not operate in isolation but are linked to the people and the organization (Keegan *et al.,* 2018). To accommodate paradoxical tensions, organizational structures, leadership styles, roles, employment relationships, mindsets, and careers also change (e.g., Gaim, 2019; Arvidsson, 2009; Prouska and Kapsali, 2020; Mysore *et al.,* 2021). Thus, the complex, dynamic, and ambivalent organization mechanisms (e.g., ambiguous HRM systems) and human behaviors are a source of job strain, which can affect employees' work performance, health, and well-being.

Other organization and management theories are used to explore the impact of projectification on individuals at the meso level. For example, the theoretical framework of inequality regimes is used to investigate how temporary contracts, masculinity work culture, recruitment, and promotion systems in PBOs produce poor working conditions and division of labor (Olofsdotter and Rasmusson, 2016). Packendorff and Lindgren (2014) use structural organization theory, contingency theory, and critical management theory to study the reasons for projectification despite its problematic consequences for individuals. Problematic consequences of projectification may be indelible features of neo-liberal work systems (Ekman, 2013; Cicmil *et al.,* 2016; Berglund *et al.,* 2020).

Peticca-Harris *et al.* (2015) apply the theory of positional competition to explain how employees are caught in a competitive "rat-race" in which they strive for

organizational advancement and material success by working long hours. The authors argue that this theory is not sufficient to fully understand how the precarious nature of project work is masked by the power of neo-normative control and responsibilization mechanisms (Peticca-Harris *et al.,* 2015). Negative consequences for project workers are also investigated using occupational health theories (e.g., demand-control model, JD-R model; Pinto *et al.,* 2016; Bowen *et al.,* 2018; Xia *et al.,* 2018). These theories are imported from various disciplines to explore the psychodynamics of project work (e.g., motivation, commitment, personality traits). For instance, social cognitive theory is used to assess the influence of psychosocial functioning on project managers' job performance (Blomquist *et al.,* 2016). Role theory combined with social exchange theory serves as a theoretical foundation to study role overload, professional commitment, and work-life conflicts (Zheng and Wu, 2018). Likewise, Hanes and Love (2004) apply the cognitive theory of stress and coping to study the psychological flexibility of project workers. Studies on emotions draw on the emotional intelligence framework and attribution theory (Sunindijo *et al.,* 2007; Shepherd *et al.,* 2014). Lastly, the big five personality model is combined with the person-organization theory to analyze project managers' personalities (Cohen *et al.,* 2013).

In summary, this section answers the second research question: various theories from different disciplines are used to study the determinants of the negative aspects of project work at the three levels of the model (see Figure 2) and their consequences for individual project workers. There is no dominant (meta-)theory; rather, the choice of theory seems to depend on the specific research problem, and theories are also used in combination.

6. Conclusion

Research on the negative consequences of project work is increasing, but the multi-disciplinary nature corresponds to a dispersion of research findings, which may be detrimental to the accumulation of knowledge. To consolidate the current body of knowledge, this paper presented a comprehensive systematic literature review and

integrated the different determinants of the negative aspects of project work and their consequences for individuals in a multi-level model.

6.1. Implications for research and practice

The model presented in Figure 2 and the findings of this review provide a foundation for theory development. Theory can be developed not only at each level of the determinants of the negative aspects of project work but also at multiple levels, including their potential interactions.

Furthermore, the model can guide empirical research in choosing the relevant levels of analysis of determinants and, depending on this choice, the appropriate theory. The model and the findings regarding the use of theory can also be helpful for combining the macro, meso, and micro levels of theorizing and empirical research and for integrating theories. For instance, combining institutional theory with conservation of resources theory can help explain the internal and external institutional pressures that force firms to behave in a certain way, the role of the organization in determining the resources available for project participants, and how the lack of such resources may affect individual outcomes.

The results of the present study can also inform practitioners about the most prevalent determinants of the negative aspects of project work. This can facilitate the creation of work environments that mitigate the negative consequences for individual project workers. In particular, the model presented in Figure 2 allows efforts to be focused on the determinants at each level that may be relevant in the specific organization. Regarding individual factors, the selection of project personnel can be facilitated to obtain a high degree of fit between individual attributes and the work characteristics of the project environment (Goetz et al., 2021). The factors identified at the project level can help project managers create a positive project work environment. Organizational factors are mostly relevant for managers in the permanent organization and managers at the interface of the permanent organization and the temporary (project) organization (e.g., the project management office). Finally, environmental factors are relevant for policy makers;

since projectification is increasing in all sectors of the economy (Schoper et al., 2018), reducing the negative aspects of project work may not only improve individuals' well-being but also translate into better economic performance.

6.2. Emerging topics and future research agenda

First, this study calls for a better theoretical foundation for research on the negative aspects of project work. One important topic warranting further examination is the applicability of sociological and psychological theories to project stressors and their impact on project participants' health and well-being (Pinto *et al.,* 2014; Bowen *et al.,* 2018). Empirical research on novel working conditions and their impact on employees' health is particularly scarce (Raetze *et al.,* 2018). Future research should also explore how work-related contact affects the experience of workplace stress, productivity, and workaholism (Bowen *et al.,* 2018).

Another emerging topic is "personal projectification," which encompasses a project worker's identities, mindsets, skills and competencies, social capital (Berglund *et al., 2020*), and the psychological factors that influence the response to the negative aspects of project work (e.g., Yip *et al.,* 2008). The consequences of project-based fragmentation of careers and lives (Berglund *et al.,* 2020) and the influence of personal traits on the relationship between project stressors and work-related outcomes (An *et al.,* 2019; Lawani and Moore, 2021) merit further research.

This study also calls for research on paradoxical practices and hybridity in PBOs and their impact on employees' well-being and performance (e.g., Gaim *et al.,* 2019). Further research should address the co-evolution of paradoxes and responses in terms of employees' well-being versus work performance (Keegan *et al.,* 2018) and how HR specialists can embrace the contextual development of PBOs and the increased complexity of actors involved in hybrid HRM processes (Keegan and De Hartog, 2019). Empirical research should also explore the influence of governance systems and organizational climate on project workers' voice behaviors (Prouska and Kapsali, 2021).

Finally, this review encourages advances in research design by advocating the use of ethnography, mixed methods, action research, multi-level modeling, and longitudinal approaches, which have rarely been applied to this topic, to provide greater breadth and depth of knowledge on the negative aspects of project work.

6.3. Limitations

This study has several limitations. The first limitation is the selection criteria, as the search strategy was limited to the specific terms used as keywords and to three academic databases. Relevant contributions may have been filtered out or overlooked because they did not include the search terms in their text. Likewise, the search only included research published in peer-reviewed journals. Given the practical nature of project management, publications in practitioner journals or publications by professional project management associations may also provide essential insights into the determinants of negative aspects of project work and their consequences for individuals. Finally, the review was limited to negative aspects of project work and their implications for individual project participants. The positive aspects of project work may outweigh some of its negative aspects.

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