

The Journal of Behavioral Science (TJBS)

Systematic Review

A Systematic Review of Proactive Work Behavior: Future Research Recommendation

Andika Setia Pratama¹, Ahmad Rizki Sridadi², Anis Eliyana^{3*}, Rachmawati Dewi Anggraini⁴, and Nurul Liyana Mohd Kamil⁵

Author Affiliation

¹ Master of Science in Management Student, Universitas Airlangga, Surabaya, Indonesia.

² Associate Professor, Universitas Airlangga, Surabaya, Indonesia

³ Professor, Universitas Airlangga, Surabaya, Indonesia.

⁴ Research and Publication, PT Usaha Mulia Digital Indonesia (PT UMDI), South Jakarta, Indonesia.

⁵ Senior Lecturer, Universiti Malaya, Kuala Lumpur, Malaysia.

*Corresponding author e-mail:
anis.eliyana@feb.unair.ac.id

Article Information

Received: 9.12.22

Revised: 9.12.22

Accepted for initial review: 12.1.23

Keywords

Proactivity, proactive behavior, proactive work behavior, systematic review

Abstract

Fifteen years since it was first put forward, proactive work behavior has become the attention of academics within the scope of organizational behavior. The development of proactive work behavior can be observed from the increasing number of studies every year. In response to these developments, five literature reviews were conducted to provide direction for the development of proactive work behavior research. However, only one literature review has mapped out previous research on proactive work behavior. Therefore, this systematic literature review (SLR) aimed to do a broader mapping by including research samples, measurement instruments, antecedents, and consequences of proactive work behavior. A total of 70 research articles published in the Scopus database during 2007-2022 were used for this SLR. The mapping results show the dominance of employees as a research sample which covers more than half of the research articles. Meanwhile, instruments with fewer items tend to be adopted to measure proactive work behavior. The findings related to antecedents and consequences are dominated by individual aspects and do not explore team/group and organizational aspects. In response to these findings, further research needs to be directed to explore proactive work behavior in certain professional and organizational contexts. Furthermore, the measurement instrument for proactive work behavior needs to be further developed by considering organizational characteristics, both private and public sector. Regarding antecedents and consequences, team/group and organizational dynamics need to be explored further by future research so that there is no stagnation in the progress of the development of proactive work behavior studies.

As the primary emphasis of organizational behavior research, human resource management experts have conducted extensive research on individual behavior. The development of organizational behavior research has been successful in generating concepts about the behaviors that individuals should exhibit to support organizational effectiveness and efficiency. Proactive work behavior is one of the individual behaviors that has become the focus of research within the field of organizational behavior. Parker et al. (2006) introduced the term "proactive work behavior" 15 years ago in an article that is frequently cited in proactive work behavior research. Over the past 15 years, proactive work behavior research has undergone substantial progress, as evidenced by an annual increase in the number of articles in the Scopus database. In response to these developments, a number of researchers have attempted to conduct a literature review with the intent of guiding future research on proactive work behavior.

The first identified literature review was conducted by Wu and Parker (2013), which focused on the concept of proactivity. Broadly speaking, the literature review conducted a critical study of

conceptualization of proactivity from individual, behavioral, and goal-oriented perspectives. Furthermore, Wu and Parker (2013) also explained mechanism of proactivity in a comprehensive manner, accompanied by a study of the antecedents and their consequences. Six years after literature review by Wu and Parker (2013), a further literature review was conducted by Parker et al. (2019). Unlike the previous literature review, Parker et al. (2019) took a behavioral perspective in assessing proactivity, which reviewed 95 research articles on proactive behavior that focused on investigating the moderators of proactive behavior toward its outcomes. In addition, Zhang (2020) performed a literature review on proactive behavior, which described the evolution of proactive behavior construct and its measurement instruments in the study. In addition, Zhang (2020) critically examined several grand theories used in previous research to explain the mechanism underlying proactive behavior. Li (2020) conducted an in-depth literature review on antecedents and outcomes of proactive behavior in the same year. In addition, Hou and Huang (2021) conducted the subsequent literature review, which discussed proactive behavior model's antecedents as well as its mediation and moderation mechanisms.

Only Parker et al. (2019) mapped several sources of research articles on proactive work behavior as premise for a literature review out of the five conducted. According to objectives of their respective literature study, four other literature reviews did not conduct an analysis of research articles but instead provided critical evaluations of proactive work behavior. Although the five literature reviews have contributed to development of proactive work behavior studies, no literature review exists that maps context (samples), measurement instruments, and findings in proactive work behavior research. This mapping is essential in order to provide an accurate comprehension of proactive work behavior research conducted in 15 years since the concept was introduced.

Thus, this systematic literature review (SLR) concentrates on delineating 1) research samples, 2) measurement instruments, 3) antecedents, and 4) consequences of proactive work behavior from previous studies conducted between 2007 and 2022. Mapping research samples identifies "gaps" that are infrequently filled by researchers. Understanding the tendency of previous studies to employ proactive work behavior measurements necessitates the mapping of measurement instruments. With this knowledge, researchers can implement the most effective proactive work behavior measurements to enhance their research's effectiveness. In addition, mapping of antecedents and outcomes is performed to prevent saturation of the proactive work behavior research model, which would result in its stagnant development.

Literature Review

There are various perspectives regarding proactive work behavior in various studies. Individual proactive work behavior is characterized by two characteristics: Proactive idea implementation and proactive problem-solving (Parker et al., 2006). Individual actions that communicate and implement ideas to enhance working conditions are referred to as proactive idea implementation. Parker et al. (2006) emphasized that if an individual's idea did not emphasize novelty, it could not be considered an innovative action. On the other hand, proactive problem solving refers to future-focused actions initiated by individuals with the intention of preventing problems from occurring. According to Parker et al. (2006), the most essential aspect of proactive work behavior is presence of individual efforts to take future-oriented initiatives, whether in the form of articulating ideas or implementing them. Moreover, Grant and Ashford (2008) characterized proactive work behavior as anticipatory actions taken by individuals to influence themselves and/or their surroundings. In this instance, the definition of proactive work behavior includes two key elements: Acting in advance and intended impact (Grant and Ashford, 2008). Acting in advance implies that individuals' proactive work conduct is the outcome of their own initiative. In other words, individuals are agents who initiate and engage in proactive behavior without external encouragement or influence. In the meantime, intended impact indicates that proactive individual actions are predicated on the intention to create changes, which may affect workplace.

According to Bindl and Parker (2010), proactive work behavior is an individual action within an organization that is self-directed and future-oriented with the intention of bringing about change to oneself and the surrounding environment. In this definition, self-directed has the same meaning as acting in advance, in which individual proactive actions are the result of one's own initiative and are carried out independently of the influence of others. Future-focused, meanwhile, can be interpreted as anticipatory action that aims to attain future conditions or results. However, Bindl and Parker (2010) emphasized in their definition that proactive work behavior is conducted by individuals within their respective organizations. In other words, members of the organization take proactive measures in their capacities. Proactive actions are not only limited to the primary responsibilities, but they also extend beyond the primary responsibilities to support individual work. Consequently, proactive work behavior can be defined as self-initiated action with the goal of enhancing future working conditions. These actions may consist of communicating ideas and/or proactively implementing these ideas in an effort to enhance self-conditions or the environment that supports their work in the organization. In this situation, the individual may express or implement something new or attempt to prevent future problems.

Method

This SLR was guided by the Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA). Meanwhile, PRISMA provides literature determining protocols for SLRs, including identification, screening, eligibility, and included phases (Narmaditya & Sahid, 2023; Page et al., 2021). This SLR used research articles published in 2007-2022 in reputable scientific journals indexed by Scopus. Scopus was selected based on its reputation and credibility as a scientific database literature that has received wide recognition from academics. First, search for articles was done using the term “proactive work behavior” in the Scopus search field.

In order to obtain relevant articles, this SLR limited articles with the following criteria: a) written in English, b) research articles, c) final publication, d) sourced from scientific journals, e) quantitative, f) within the scope of organizational behaviour, g) placing proactive work behavior as an independent, dependent, or mediating variable, and h) fully accessible through the literature access service owned by Universitas Airlangga. In addition, this SLR also limited the keywords to “proactive behavior”; “proactive work behavior”; “proactive behaviour”; and “proactivity” to ensure the relevance of the articles.

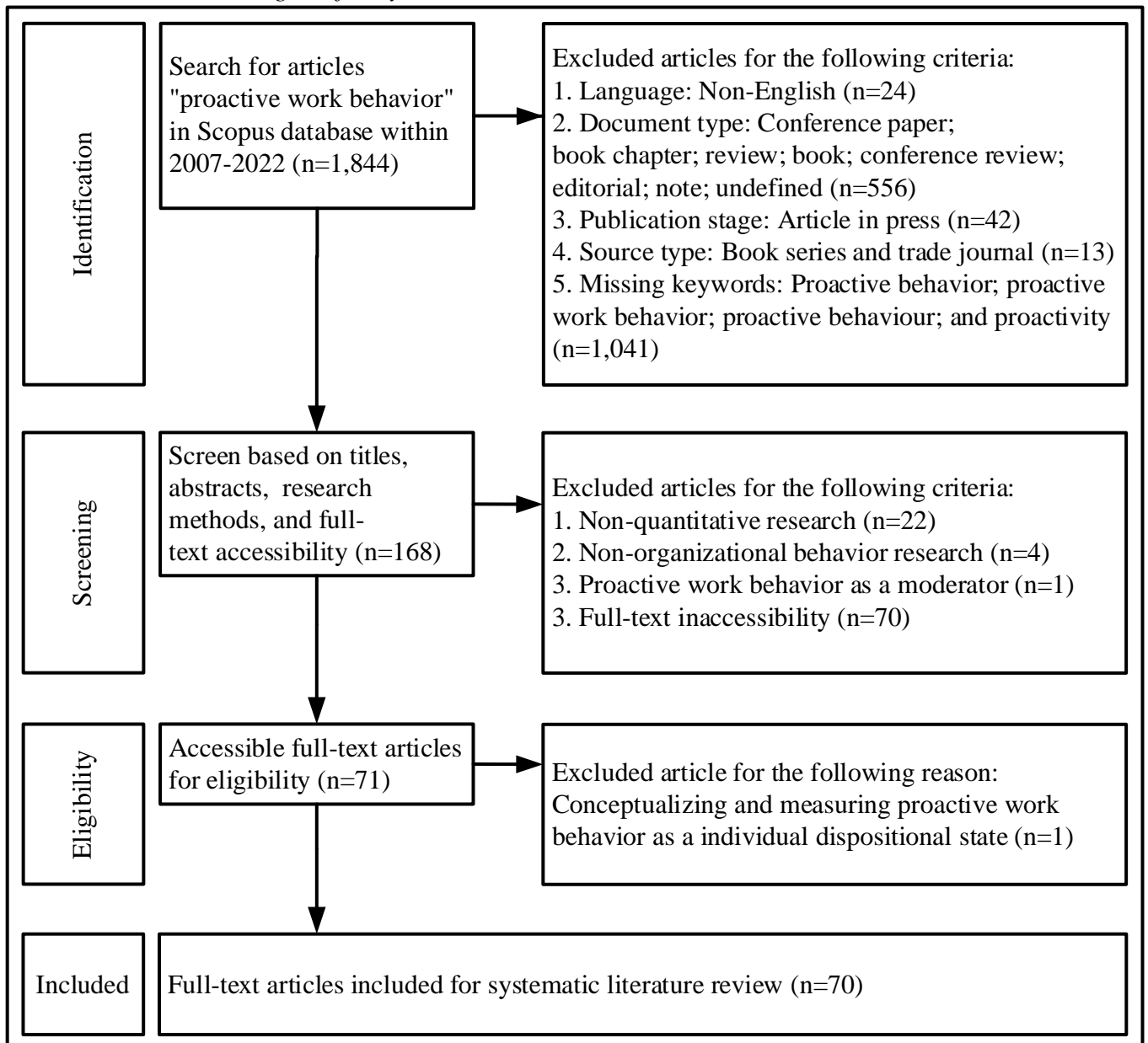
In general, the search for articles in this SLR is presented in the PRISMA flowchart in Figure 1. Each phase displays the number and process of exclusion of irrelevant articles. The identification phase fully used the article search features on Scopus according to predetermined criteria. Furthermore, in the screening phase, researcher looked at title, abstract, research method, and accessibility of research articles. To determine eligibility of articles, researchers looked at articles that could be accessed in full. At that stage, the main concerns were conceptualization, measurement, research samples, antecedents, and consequences of proactive work behavior. The final results of the search found 70 research articles that were relevant and used as material for analysis in this SLR.

Results

Before presenting results that align with research questions, the profile mapping of reviewed articles is presented. The profile of research articles includes year of publication (Figure 2), publisher's journal (Table 1), sector of the organization under study (Table 2), and country in which the organization was studied (Table 3). As seen in Figure 2, research articles examining proactive work behavior tended to increase from 2007 to 2022. This SLR used the most research articles published in 2018. Furthermore, *Frontiers in Psychology* is journal that published the most proactive work behavior research articles, 10 out of 70 (14.30%) articles. About the context of study, most research articles examined proactive work behavior in private sector organizations (35.70%) and conducted research in China (20.00%).

Figure 1

PRISMA Flow Chart Diagram for Systematic Literature Review



After profiling research articles, this SLR presented the findings based on research questions. Table 4 provides the result of mapping process of research's sample from the 70 research articles. There are 15 types of samples studied in 70 research articles. Most of the research articles examined employees as the focus of study, which was 52.90%. Furthermore, 8.60% of the research articles examined proactive work behavior in the context of dyadic relationships between employees and their supervisors, while 1.40% were in the context of dyadic relationships between employees and colleagues. However, not all research articles studied one type of sample. The research articles that examined proactive work behavior in several research's samples at once were also quite widely carried out, namely 10.00% of 70 research articles.

To respond to the second research question, this SLR mapped the proactive work behavior measurement instruments used in the 70 research articles in Table 5. 25.70% of the research articles adopted the measurement developed by Griffin et al. (2007). In second order, the measurement that was commonly used was from Morrison and Phelps (1999), which is 15.70%. Furthermore, the measurement of Frese et

al. (1997) was adopted by 14.30% of the research articles. Meanwhile, 21.40% of research articles adopted measurements from more than one source.

Figure 2

Number of Publications on Proactive Work Behavior

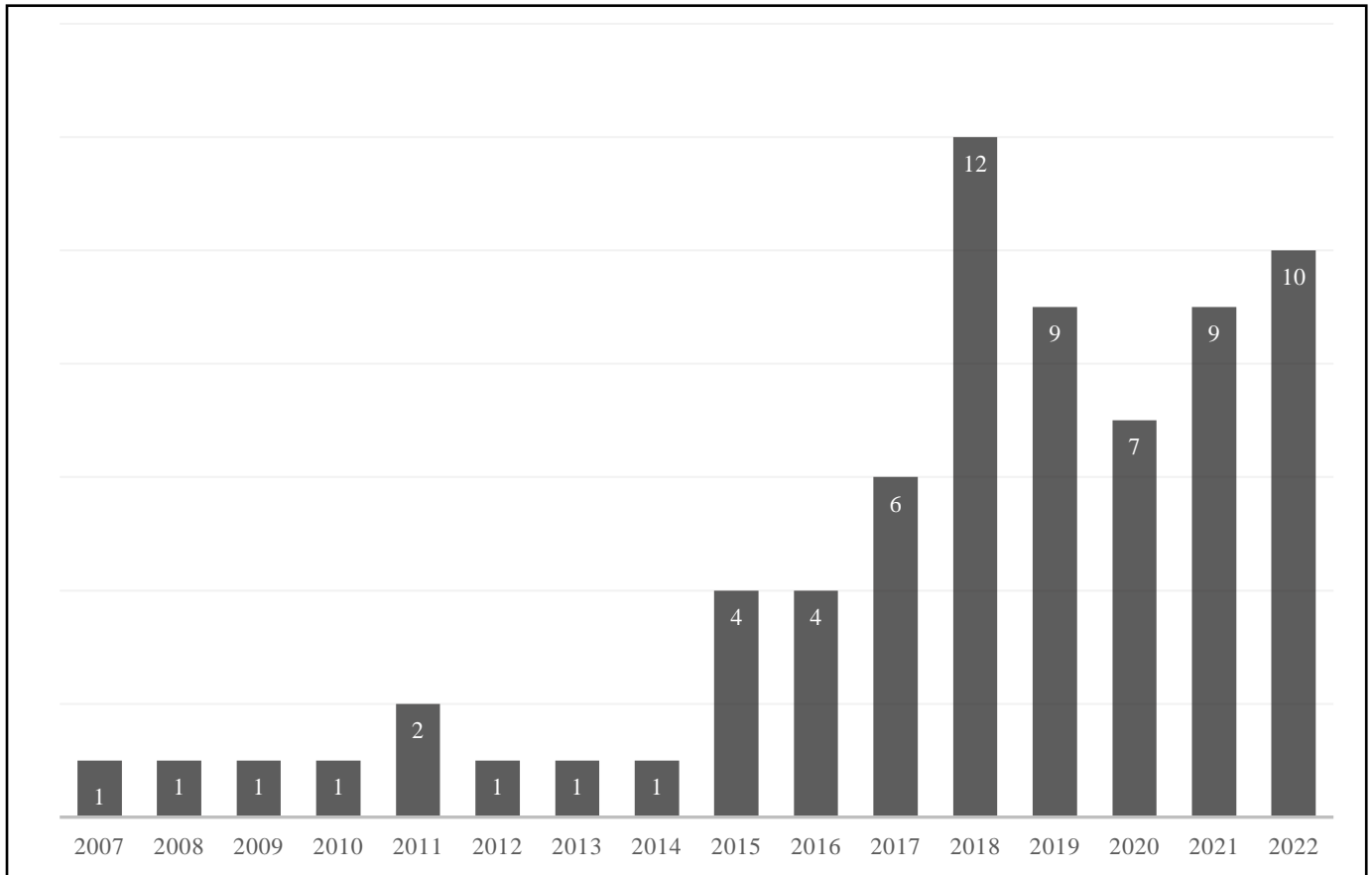


Table 1

Name of Journal Publishing the Research Articles

Journal	Quartile	n	Percentage
Frontiers in Psychology	Q2	10	14.3%
Journal of Vocational Behavior	Q1	4	5.70%
International Journal of Human Resource Management	Q1	3	4.30%
Journal of Behavioral Science	Q3	3	4.30%
Journal of Management	Q1	3	4.30%
Journal of Occupational and Organizational Psychology	Q1	3	4.30%
Journal of Organizational Behavior	Q1	3	4.30%
Asia Pacific Journal of Management	Q1	2	2.90%
International Journal of Environmental Research and Public Health	Q1	2	2.90%
Journal of Applied Behavioral Science	Q2	2	2.90%
Journal of Applied Psychology	Q1	2	2.90%
Journal of Occupational Health Psychology	Q1	2	2.90%
Psychology Research and Behavior Management	Q2	2	2.90%
Sustainability	Q1	2	2.90%
Other Journals (N=1 (Q1, Q2, Q3, Q4, Discontinued))		27	38.60%

Table 2
Organization Type Researched

Sector	n	Percentage
Private	25	35.70%
Public	14	20.00%
Private & Public	10	14.30%
Unidentified	21	30.00%

Table 3
Country of Research

Country	n	Percentage
China	14	20.00%
United States	7	10.00%
German	6	8.60%
Thailand	4	5.70%
Canada	3	4.30%
Dutch	3	4.30%
Spain	3	4.30%
Australia	2	2.90%
Indonesia	2	2.90%
South Korea	2	2.90%
Turkiye	2	2.90%
Multi-Country	4	5.70%
Other (n=1)	11	15.70%
Unidentified	7	10.00%

Table 4
Distribution of Proactive Work Behavior Research Samples

Unit of Analysis	n	Percentage
Employee	37	52.90%
Employee-Supervisor (Dyadic)	6	8.60%
Manager / Supervisor	4	5.70%
Team	4	5.70%
Academics	2	2.90%
Teacher	2	2.90%
Community workers	1	1.40%
Consultant	1	1.40%
Employee-Colleague (Dyadic)	1	1.40%
Members	1	1.40%
Non-Permanent employee	1	1.40%
Nurse	1	1.40%
State Detention Officer	1	1.40%
Student	1	1.40%
Other (Multi-samples)	7	10.00%

A mapping of the antecedents of proactive work behavior can be observed in Table 6. Based on 70 research articles, there were 127 antecedents' effect on proactive work behavior. The 127 antecedents' effect consisted of 96 that proved to be significant and positive, 14 that proved to be significant & negative, 11 that proved insignificant & positive, and six effect that did not prove significant & negative. In general, the antecedents of proactive work behavior are divided into eight categories, including a) individual aspects (individual characteristics; individual actions; individual competence; individual motivation, and individual attitudes), b) work-related aspects, c) leader/supervisor aspects, and d) organizational aspects. Finally, this SLR mapped out the proactive work behavior consequence variables observed in Table 7. There are 45

effect of proactive work behavior on other variables (consequences). The 45 consequences consisted of 38 that proved to be significant & positive, two consequences proved to be significant & negative, and four consequences proved insignificant & positive. One consequence did not prove significant & negative. In general, there are three categories of consequences of proactive work behavior, such as; a) individual outcomes, b) work-related outcomes, and c) team outcomes.

Table 5

Measurement of Proactive Work Behavior

Measurement	n	Percentage
Griffin et al. (2007)	18	25.70%
Morrison and Phelps (1999)	11	15.70%
Frese et al. (1997)	10	14.30%
Parker and Collin (2010)	6	8.60%
Ashford and Black (1996)	1	1.40%
Bateman and Crant (1993)	1	1.40%
Belschak and Hartog (2010)	1	1.40%
Frese and Fay (2001)	1	1.40%
Gawke et al. (2017)	1	1.40%
Li and Tian (2014)	1	1.40%
Parker et al. (2006)	1	1.40%
Van Dyne and LePine (1998)	1	1.40%
Multi-Source	15	21.40%
Unidentified	2	2.90%

Discussion and Conclusion

This SLR's preliminary findings indicated that proactive work behavior has been investigated in a variety of organizational and national contexts. In the context of proactive work behavior research, the private sector has dominated for the past 15 years. This occurs because private sector organizations are typically in an unstable environment and require personnel who can adapt to change. Additionally, there is a perception that organizations in the private sector are more prestigious than those in the public sector (Lyons et al., 2006). Consequently, the majority of research was conducted on private sector organizations. Consistent with the dominance of the private sector, China is the nation where the majority of research on proactive work behavior is conducted. This is inextricable from China's status as the world's most populous country. In addition, the fact that the number of private sector organizations in China has reached 47 million (Yu, 2023), provides ample opportunities for research on various categories of private sector organizations. This opportunity was effectively exploited by Chinese academics, allowing their research output to surpass that of their American counterparts (Lu, 2022). Therefore, it is clear that China has conducted a great deal of research on proactive work behavior. Next, each sub-section will provide a discussion of each research query.

Research's Sample of Proactive Work Behavior

It is known that most of the research samples of proactive work behavior in SLR are "employees". The use of the term employee can be viewed from three perspectives, namely scientific scope, research methods, and ethics. The domain of organizational behavior encompasses the subject matter of proactive work behavior from a scientific perspective. Organizational behavior is centered on comprehending and elucidating the conduct of individuals and groups within organizational settings (Luthans et al., 2021, p. 15). Therefore, it is understandable that the majority of research on proactive work behavior is carried out at the individual level although there are studies that examine this topic at the team level (Fu et al., 2020; Junker et al., 2022; Rousseau & Aubé, 2018; Zhang et al., 2020). Furthermore, Luthans et al. (2021, p. 15) asserted that organizational behavior is typically grounded in theory and closely linked to practice-oriented human resource management. Thus, the concept of proactive work behavior is theoretically applied to employees as individuals who are managed by human resource management within the organization.

Regarding research methodologies, all of the research in this SLR employed a quantitative approach. Quantitative research aims to generalize the sample's results to the population (Polit & Beck, 2010). The utilization of the term "employee" served to augment the applicability and generalizability of the conclusions drawn with respect to proactive work behavior across diverse organizational contexts. This was done because every organization has employees who support the organization's operational activities, despite its different designation. Attempts at generalization would be more challenging if researchers employed terms specific to particular occupations. Several studies have demonstrated this phenomenon, such as the research conducted by Syamsudin et al. (2022), whose findings were largely relevant to state detention centers, and Matsuo (2020), whose results were applicable to the realm of healthcare services.

As for the review from the perspective of research ethics, the use of term "employee" is in accordance with the principle of anonymity. In this case, anonymity refers to the collection of respondent data without obtaining any personal information that can be identified by others (Coffelt, 2017; Walford, 2005). In fact, researchers must maintain anonymity of respondents when research outcomes are published (National Research Ethics Committees, 2022). Thus, the use of more general term employee was an attempt to protect personal identity of respondents. This was also the commitment to comply with research ethical standards set by journals and authorized institutions. Several studies in this SLR did not even mention the context of the organization and country where the research was conducted and only mention term "employee" as a respondent (Bark et al., 2022; Cooper-Thomas et al., 2014).

Measurement Instrument of Proactive Work Behavior

Regarding research instruments, this SLR discovered that the majority of studies employed Griffin et al. (2007) three items of proactive work behavior measurement. The use of these measurement items can be explained from two perspectives: the measurement's content and effectiveness of data collection. Compared to other measurements, three items devised by Griffin et al. (2007) are the most comprehensive in terms of measurement content. This measurement is deemed exhaustive because it does not only assess the core of proactive work behavior, but also the core of other related constructs, such as personal initiative, taking charge, and innovator role behavior. Individual task proactivity is a construct that elaborates on the four constructs. Individual task proactivity is self-motivated, future-focused behavior that seeks to alter work situations, work responsibilities, or oneself. (Griffin et al., 2007). Moreover, the definition of individual task proactivity includes three components: a) initiating a better method of work, b) generating ideas to improve work completion, and c) implementing changes in work completion efforts. These three items comprise the central component of proactive work behavior, namely the generation and execution of ideas (Parker et al., 2006). Initiation and implementation of ideas are also associated with "creativity that contributes to work effectiveness," which is associated with the innovator role behavior construct (Welbourne et al., 1998). The essence of personal initiative is self-initiated behavior aimed at enhancing working conditions (Frese et al., 1997). In the individual task proactivity measurement item, the essence of the taking charge construct is derived from the individual's endeavors to bring about work-related context-related changes (Morrison & Phelps, 1999). In order to avoid confusion regarding the similarity of the proactive work behavior with other constructs, it is understandable why the majority of research utilized individual task proactivity measurement items when measuring proactive work behavior.

In terms of the effectiveness of data collection, Griffin et al. (2007) proactive work behavior measurement instrument has the fewest number of items when compared to other instruments. The instrument devised by Morrison and Phelps (1999) contains ten measurement items for comparison. Moreover, Frese et al. (1997) created a seven-item measurement instrument. Parker et al. (2006) also devised the eight proactive work behavior measurement items. With fewer measurement items, the collected data were more numerous and able to measure the variables better. This is corroborated by previous research indicating that instruments with fewer measurement items have a higher response rate (Rolstad et al., 2011; Subar et al., 2001). Additionally, instruments with fewer measurement items possess a greater measurement model fit (Mannion et al., 2022). On this basis, it can be deduced that the use of instruments with a small number of measurement items has advantages in terms of the effectiveness and quality of data collection. It is not surprising that numerous studies have adopted the proactive work behavior instrument developed by Griffin et al. (2007), given the numerous benefits described.

Table 6*Antecedent(s) of Proactive Work Behavior*

No.	Antecedent(s)	S		NS		No	Antecedent(s)	S		NS	
		+	-	+	-			+	-	+	-
	Individual Aspect(s)					23	Perceived Lack of Goal Progress		1		
	Individual Characteristic					24	Self-Determination	1			
1	Proactive Personality	3				25	Benevolence Work Values	1			
	Individual Action(s)					26	Employee Resilience	1			
1	Blogging with coworkers	1				27	Job Embeddedness	1			
2	Blogging with outsider	1				28	Psychological Empowerment	1			
3	Strengths Use	1				29	Organizational Identification	1			
4	Reducing Demands			1		30	Relationship with Supervisor	1			
	Individual Competence(s)					31	Organizational Commitment	1			
1	Political Skill	1				32	perceived insider status	1			
2	Political Knowledge	1				33	Psychological Capital	1			
3	Adaptivity	1				34	Sense of Role Overload		1		
4	Aesthetic sensitivity	1				35	Job Insecurity		2		
5	Passion	1				36	Work-family conflict		1		
	Individual Motivation(s)					37	Emotional Exhaustion		1		
1	Intrinsic Motivation	1					Work-Related Aspect(s)				
2	Political Will	1				1	HRM Practice	1			
3	Need for cognition	1				2	Illegitimate Tasks			1	
4	Consideration of future			1		3	Work Authenticity	1			
5	Learning Goal orientation			1		4	Job Complexity	1			
6	Performance goal orientation		1			5	Ease of excitation				1
7	Autonomus Motivation	1				6	Low sensory threshold			1	
8	Seeking Respurce	1				7	Job Resources	1		1	
9	Seeking Challenge			1		8	Time Preassure	1			
10	Prosocial motivation	1				9	Situational Constrains	1			
11	Career Aspirations	1				10	Job Demand	1			
12	Intention to behave proactively	1				11	Role Conflict		1		
	Individual Attitude(s)					12	Role Ambiguity		1		
1	Self-Efficacy	1				13	Task Variety	1			
2	Work Engagement	10				14	Feedback			1	
3	Sense of Competence	1				15	Job Characteristic	1			
4	Positive Affect	2				16	Sustainable employability	1			
5	Negative Affect	1				17	Work uncertainty		1		
6	Psychological Safety	2		1			Leader/Supervisor Aspect(s)				
7	Role Breadth Self-Efficacy	8				1	Distributed Leadership	1			
8	Felt responsibility for change	1				2	Inclusive Leadership	1			
9	Perceived Overqualification			1		3	Transformational Leadership	3		1	1
10	Sense of Self- Worth	1				4	Shared Leadership	1			
11	Perceived leader trust	1				5	Servant Leadership	1			
12	Meaningfulness of Work	1				6	Authentic Leadership	1		1	1
13	Employee Trust	1				7	Empowering Leadership	1			
14	Job Autonomy	4				8	Entrepreneurial Leadership	1			
15	Quality of Work Life	1				9	Abusive Supervision		1		
16	Positive Orientation	1				10	Supervisor Identification				1
17	Job Satisfaction	4				11	Supervisor Close Monitoring	1			
18	Attitude toward Organization	1				12	Distrust in Supervisor	1			
19	Affective Commitment	1					Organizational Aspect(s)				
20	Leader Secure-base Support	1				1	Learning-Oriented Org. Climate	1			
21	Job Identity	1				2	Org. Pride in Employees' Effort	1			
22	Vitality at work	1		1		3	Org. Pride in Employees' Abl.		1		
Total Relationship								96	14	11	6

Note. Significant (S); Not Significant (NS)

Table 7*Consequence(s) of Proactive Work Behavior*

No.	Consequence(s)	S		NS		No	Consequence(s)	S		NS	
		+	-	+	-			+	-	+	-
	Individual Outcome(s)										
1	Social Integration	1				21	Individual Contribution to Organization Capabilities	1			
2	Job Satisfaction	3		1		22	Innovative Work Behavior	1			
3	Organizational Commitment	1				23	Affective Commitment	1			
4	Intention to Remain	1				24	Conflict		1		
5	Likeability				1	25	Work-Life Balance	1			
6	Perceived Competence	2				26	Individual Performance	1			
7	Irritability			1		27	Success Expectation	1			
8	Rumination			1		28	Hireability	1			
9	Turnover Intention	1				29	Task Mastery	1			
10	Career Success	2				30	Agency	1			
11	Work Engagement	2				31	Communion	1			
12	Exhaustion	1				32	Coworker Competence Perc.	1			
13	Innovativeness	1				33	Coworker warmth Perc.		1		
14	Work Avoidance	1				34	Repatriates' adjustment	1			
15	Anxiety	1		1			Work-Related Outcome(s)				
16	Work-family conflict	1				1	Role Clarity	1			
17	Job Strain	1				2	Task Conflict	1			
18	Work Performance	1				3	Performance Evaluation	1			
19	Well-being	1					Team Outcome(s)				
20	Learning	1				1	Team Innovation	1			
Total Relationship								38	2	4	1

Note. Significant (S); Not Significant (NS)

Antecedents of Proactive Work Behavior

It was known, based on the results of SLR mapping, that numerous previous studies had examined various antecedents of proactive work behavior in various contexts. There are four general factors that contribute to proactive behavior, namely individual, work-related, leader/supervisor, and organizational aspects. The individual aspect is the antecedent group whose influence on proactive work behavior has been extensively investigated. This is inextricable from the scientific scope of organizational behavior, which attempts to comprehend and explain the behavior of individuals within organizations (Luthans et al., 2021, p. 15). In other terms, the "individual" is the primary focus of organizational behavior research. However, individuals cannot exist independently from the organization. Therefore, interactions between individuals and organizations cannot be avoided. Therefore, this SLR also examined extra-individual factors (such as work-related, leader/supervision, and organizational factors) that were proven to influence an individual's proactivity or lack thereof in an organization.

With regard to individual aspects, the majority of research focused on individual attitude as an antecedent of proactive work behavior. One of the studies that examined several individual attitudes is Smithikrai (2019) which tested the direct effect of work engagement, positive orientation, career satisfaction, and attitude toward organization on proactive work behavior. Besides attitude, another individual variable that was successfully identified is personality which is included in individual characteristics. However, research investigating the relationship between personality and proactive work behavior is still small and is limited to proactive personality. Only three studies have proved the contribution of proactive personality to individual proactive actions, namely Parker and Collins (2010) and Wu et al., (2018), and the most recent was conducted by Syamsudin et al. (2022). Furthermore, other studies have also investigated individual motivation as a driving factor for proactive actions, such as intrinsic motivation (Worawattanaparinya, 2020), autonomous motivation (Wu & Parker, 2017), and prosocial motivation (Lebel & Patil, 2018). As for other individual aspects, namely individual competence, it could be identified

from one of the studies which succeeded in proving that political knowledge and political skills can influence proactive work behavior (Granger et al., 2020).

In addition to individual aspects, there were also work-related aspects that served as antecedents of proactive work behavior. One of these is human resource management practice, which contributes to the proactive actions of individuals within organizations (Pham, 2021). In addition, organizational factors, such as climate and leadership style, contribute to proactive work behavior. It has been demonstrated that a learning-oriented organizational climate encourages proactive behavior at work (Caniëls & Baaten, 2019). Additionally, leadership style is an organizational factor that affects proactive work behavior. Even though it is a component of an organizational factor, this SLR classifies it as a leader or supervisor aspect because it pertains explicitly to the leader's ability to influence his followers to engage in proactive behavior. Leadership styles with interesting findings include authentic leadership and transformational leadership. The two styles of leadership produced varied results. Smithikrai and Suwannadet (2018) demonstrate that authentic leadership can inspire proactive work behavior. In contrast to the findings of Liu et al. (2018), which demonstrate the inability of authentic leadership to encourage proactive work behavior, these results demonstrate the opposite. Transformational leadership is not immune to the inconsistency of research outcomes. Although Ismail et al. (2016) research demonstrates significant and positive results, do Nascimento et al. (2018) research does not demonstrate sufficient significance.

Consequences of Proactive Work Behavior

Out of a total of 70 studies in this SLR, only 31.40% investigated the impact of proactive work behavior. The small number of research articles that discussed the consequences of proactive work was caused by common purpose of organizational behavior studies. Within the framework of organizational behavior, individual, group and organizational factors lead to individual outcomes, namely performance which includes behavior (Colquitt et al., 2018). Therefore, research that sought to explore the impact of a behavior did not receive massive attention. However, it is a broad opportunity to carry out the development of organizational behavior studies in general and proactive work behavior in particular. This opportunity also has the potential to reveal new empirical facts regarding the impact of proactive work behavior within organization.

The SLR succeeded in identifying the consequences of proactive work behavior which were divided into three categories, namely individual outcomes, work-related outcomes, and team outcomes. Just like the antecedents, the consequences of proactive work behavior were dominated by individual outcomes. The many consequences of proactive work behavior towards individuals became rational because the perpetrators of proactive actions were individuals themselves. In other words, the majority of research so far has attempted to examine the effects of proactive work behavior on individuals as actors. The impact of proactive work behavior on the individual itself can be divided into two trends, namely positive and negative consequences. The positive consequences of proactive work behavior for individuals, such as career satisfaction (Ismail et al., 2016; Smithikrai, 2022), individual performance (Junker et al., 2022; Varela et al., 2019), perceived competence (Bark et al., 2022), intention to remain (Saks et al., 2011), well-being (Cooper-Thomas et al., 2014), and innovative work behavior (Nurjaman et al., 2019). Besides that, there are several consequences of proactive work behavior that have also been studied as antecedents, such as job satisfaction (Saks et al., 2011), work engagement (Cooper-Thomas et al., 2014; Gawke et al., 2018), affective commitment (Ghitulescu, 2018), and organizational commitment (Saks et al., 2011). In accordance with the organizational behavior framework (Colquitt et al., 2018), it is common for research within the scope of organizational behavior to investigate how individual attitudes influence their behavior. However, this SLR revealed a potential reciprocal relationship between behavior and attitudes that had not been explained by previous research on this SLR.

In addition, this SLR examined the negative effects of proactive work behavior on individuals. Multiple studies have attempted to identify the "dark side" of proactive work behavior. Individuals who act

pro-actively may experience exhaustion and work avoidance (Gawke et al., 2018), work-family conflict and workplace anxiety (Cui & Li, 2021), and turnover intention (Manjunathan & Vasantha, 2017). Intention to leave and intention to stay were opposites, but both had been shown to result from proactive work behavior. In other words, there was a discrepancy between previous research findings and proactive individuals' intentions to remain or leave an organization.

Work-related and team-related outcomes are the next consequence of proactive workplace behavior. As with individual negative consequences, the two categories of proactive work behavior consequences were also limited. Work-related outcomes include role clarity (Saks et al., 2011), task conflict (Spychala & Sonnentag, 2011), and performance evaluation (Bark et al., 2022). In contrast, only a single consequence of proactive work behavior was identified in terms of team outcomes: Team innovation (Rousseau & Aubé, 2018). Unfortunately, this SLR did not reveal the effects of proactive work behavior on organizational aspects, which required additional empirical research.

Limitations

The limitations of this SLR lie in the scope of the research database used. This SLR only collected empirical studies on proactive work behavior indexed in Scopus. There are still other databases that the researchers still need to explore on this SLR. In addition, this SLR only collected research over the past 15 years, namely 2007-2022, although the concept of proactive behavior in the workplace existed long before that.

Implications for Behavioral Science

This SLR is the first in the last fifteen years to simultaneously examine sample distribution, measurement instruments, antecedents, and outcomes of proactive work behavior. Consequently, its implications and novel findings about proactive work behavior were general. First, this SLR demonstrated that the research sample was saturated with employees. In response, research on proactive work behavior must be directed at the team level, a profession, or a specific organizational context in order to provide benefits that are pertinent to the organization as well as novel insights from a context perspective. The second finding of this SLR is that there was a tendency to use the same instrument to measure proactive work behavior in different organizational contexts. Further development of proactive work behavior instruments must take organizational contexts, such as the private and public sectors, into consideration. To produce instruments that are more pertinent to the characteristics of each organizational sector, these considerations are crucial. Thirdly, this SLR emphasized the absence of a team or group aspect as a motivating factor for proactive individual work behavior. Consistent with the first point, additional research must focus on factors related to team or group dynamics that have the potential to encourage proactive work behavior among individuals. Fourthly, this SLR highlighted the numerical disparity between proactive work behavior's antecedents and its consequences. Therefore, additional research is required to investigate the effects of proactive work behavior, particularly on team/group and organizational factors. It is essential to collect empirical evidence regarding the effects of proactive work behavior not only on individuals but also on teams and organizations.

Conclusion

Based on previous findings and discussion, this SLR concludes that "employees" constitute the majority of proactive work behavior research samples. In addition, previous research tends to employ instruments with small number of items for measuring proactive work behavior. Also, this SLR reveals the dominance of specific factors in the precursors and outcomes of proactive work behavior. This SLR recommends a concentration on proactive work behavior research at the team/group level and in specific organizational contexts in order to expand knowledge and comprehension of proactive work behavior.

References

- Ashford, S. J., & Black, J. S. (1996). Proactivity during organizational entry: The role of desire for control. *Journal of Applied Psychology, 81*(2), 199–214. <https://doi.org/10.1037/0021-9010.81.2.199>
- Bark, A. S. H., Seliverstova, K., & Ohly, S. (2022). Getting credit for proactivity? The effects of gender. *Journal of Applied Social Psychology, 52*(8), 660–675. <https://doi.org/10.1111/jasp.12833>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior, 14*(2), 103–118. <https://doi.org/10.1002/job.4030140202>
- Belschak, F. D., & Den Hartog, D. N. D. (2010). Pro-self, prosocial, and pro-organizational foci of proactive behaviour: Differential antecedents and consequences. *Journal of Occupational and Organizational Psychology, 83*(2), 475–498. <https://doi.org/10.1348/096317909X439208>
- Bindl, U. K., & Parker, S. K. (2010). Proactive work behavior: Forward-thinking and change-oriented action in organizations. *APA Handbook of Industrial and Organizational Psychology, Vol 2: Selecting and Developing Members for the Organization, 567–598*. <https://doi.org/10.1037/12170-019>
- Caniëls, M. C. J., & Baaten, S. M. J. (2019). How a learning-oriented organizational climate is linked to different proactive behaviors: The role of employee resilience. *Social Indicators Research, 143*(2), 561–577. <https://doi.org/10.1007/s11205-018-1996-y>
- Coffelt, T. A. (2017). Confidentiality and anonymity of participants. In M. Allen (Ed.), *Encyclopedia of Communication Research Methods*. SAGE. <https://doi.org/10.4135/9781483381411>
- Colquitt, J. A., LePine, J. A., & Wesson, M. J. (2018). *Organizational behavior: Improving performance and commitment in the workplace* (6th ed.). McGraw-Hill Education.
- Cooper-Thomas, H. D., Paterson, N. L., Stadler, M. J., & Saks, A. M. (2014). The relative importance of proactive behaviors and outcomes for predicting newcomer learning, well-being, and work engagement. *Journal of Vocational Behavior, 84*(3), 318–331. <https://doi.org/10.1016/j.jvb.2014.02.007>
- Cui, Z., & Li, Y. (2021). The relationship between proactive behavior and work-family conflict: A moderated mediation model. *Frontiers in Psychology, 12*, Article ID 657863. <https://doi.org/10.3389/fpsyg.2021.657863>
- do Nascimento, T. T., Porto, J. B., & Kwantes, C. T. (2018). Transformational leadership and follower proactivity in a volunteer workforce. *Nonprofit Management and Leadership, 28*(4), 565–576. <https://doi.org/10.1002/nml.21308>
- Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. *Research in Organizational Behavior, 23*(2001), 133–187. [https://doi.org/10.1016/S0191-3085\(01\)23005-6](https://doi.org/10.1016/S0191-3085(01)23005-6)
- Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. (1997). The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology, 70*(2), 139–161. <https://doi.org/10.1111/j.2044-8325.1997.tb00639.x>
- Fu, H., Ye, B. H., & Xu, X. (2020). The cross-level effect of shared leadership on tourism employee proactive behavior and adaptive performance. *Sustainability (Switzerland), 12*(15), 6173. <https://doi.org/10.3390/su12156173>
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2017). Employee intrapreneurship and work engagement: A latent change score approach. *Journal of Vocational Behavior, 100*, 88–100. <https://doi.org/10.1016/j.jvb.2017.03.002>
- Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2018). Personal costs and benefits of employee intrapreneurship: Disentangling the employee intrapreneurship, well-being, and job performance relationship. *Journal of Occupational Health Psychology, 23*(4), 508–519. <https://doi.org/10.1037/ocp0000105>

- Ghitulescu, B. E. (2018). Psychosocial effects of proactivity: The interplay between proactive and collaborative behavior. *Personnel Review*, 47(2), 294–318. <https://doi.org/10.1108/PR-08-2016-0209>
- Granger, S., Neville, L., & Turner, N. (2020). Political knowledge at work: Conceptualization, measurement, and applications to follower proactivity. *Journal of Occupational and Organizational Psychology*, 93(2), 431–471. <https://doi.org/10.1111/joop.12293>
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28, 3–34. <https://doi.org/10.1016/j.riob.2008.04.002>
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327–347. <https://doi.org/10.5465/AMJ.2007.24634438>
- Hou, X., & Huang, R. (2021). The literature review of proactive behavior at work. *Proceedings of the 2021 International Conference on Modern Education and Humanities Science (ICMEHS 2021)*, 129–132.
- Ismail, A., Mohd Nowalid, W. A. W., & Bakar, R. A. (2016). Proactive behaviour as a mediator of the relationship between career management and career satisfaction. *Jurnal Pengurusan*, 48, 99–110. <https://doi.org/10.17576/pengurusan-2016-48-08>
- Junker, T. L., Bakker, A. B., Gorgievski, M. J., & Derks, D. (2022). Agile work practices and employee proactivity: A multilevel study. *Human Relations*, 75(12), 2189–2217. <https://doi.org/10.1177/00187267211030101>
- Lebel, R. D., & Patil, S. V. (2018). Proactivity despite discouraging supervisors: The powerful role of prosocial motivation. *Journal of Applied Psychology*, 103(7), 724–737. <https://doi.org/10.1037/apl0000301>
- Li, R., & Tian, X. (2014). Supervisor authoritarian leadership and subordinate proactive behavior: Test of A Mediated-Moderation Model. *Acta Psychologica Sinica*, 46(11), Article ID 1719. <https://doi.org/10.3724/sp.j.1041.2014.01719>
- Li, X. (2020). The preliminary literature review of proactive behavior. *American Journal of Industrial and Business Management*, 10(5), 915–919. <https://doi.org/10.4236/ajibm.2020.105061>
- Liu, Y., Fuller, B., Hester, K., Bennett, R. J., & Dickerson, M. S. (2018). Linking authentic leadership to subordinate behaviors. *Leadership and Organization Development Journal*, 39(2), 218–233. <https://doi.org/10.1108/LODJ-12-2016-0327>
- Lu, D. (2022, August 11). *China overtakes the US in scientific research output*. The Guardian. <https://www.theguardian.com/world/2022/aug/11/china-overtakes-the-us-in-scientific-research-output>
- Luthans, F., Luthans, B. C., & Luthans, K. W. (2021). *Organizational Behavior: An Evidence-Based Approach* (14th ed.). Information Age Publishing.
- Lyons, S. T., Duxbury, L. E., & Higgins, C. A. (2006). A comparison of the values and commitment of private sector, public sector, and parapublic sector employees. *Public Administration Review*, 66(4), 605–618. <https://doi.org/10.1111/j.1540-6210.2006.00620.x>
- Manjunathan, S., & Vasantha, S. (2017). Mediation effects: Proactive behavior on work engagement and turnover intention with reference to it sector, Chennai, Tamil Nadu. *International Journal of Applied Business and Economic Research*, 15(4), 261–272. https://serialsjournals.com/abstract/69469_ch_21_f_-_sandhya_manjunath.pdf
- Mannion, A. F., Elfering, A., Fekete, T. F., Harding, I. J., Monticone, M., Obid, P., Niemeyer, T., Liljenqvist, U., Boss, A., Zimmermann, L., Vila-Casademunt, A., Sánchez Pérez-Grueso, F. J., Pizones, J., Pellisé, F., Richner-Wunderlin, S., Kleinstück, F. S., Obeid, I., Boissiere, L., Alanay, A., & Bagó, J. (2022). Shorter and sweeter: The 16-item version of the SRS questionnaire shows better structural validity than the 20-item version in young patients with spinal deformity. *Spine Deformity*, 10(5), 1055–1062. <https://doi.org/10.1007/s43390-022-00509-5>
- Matsuo, M. (2020). The role of work authenticity in linking strengths use to career satisfaction and proactive behavior: A two-wave study. *Career Development International*, 25(6), 617–630. <https://doi.org/10.1108/CDI-01-2020-0015>

- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42(4), 403–419. <https://doi.org/10.2307/257011>
- Narmaditya, B. S., & Sahid, S. (2023). Financial literacy in family and the economic behavior of university students: A systematic literature review. *Journal of Behavioral Science*, 18(1), 114–128. <https://so06.tci-thaijo.org/index.php/IJBS/article/view/257900>
- National Research Ethics Committees. (2022, May 26). *Guidelines for Research Ethics in the Social Sciences and the Humanities*. National Research Ethics Committees. <https://www.forskningsetikk.no/en/guidelines/social-sciences-humanities-law-and-theology/guidelines-for-research-ethics-in-the-social-sciences-humanities-law-and-theology/>
- Nurjaman, K., Marta, M. S., Eliyana, A., Kurniasari, D., & Kurniasari, D. (2019). Proactive work behavior and innovative work behavior: Moderating effect of job characteristics. *Humanities and Social Sciences Reviews*, 7(6), 373–379. <https://doi.org/10.18510/hssr.2019.7663>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Systematic Reviews*, 10(1), 89. <https://doi.org/10.1186/s13643-021-01626-4>
- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, 36(3), 633–662. <https://doi.org/10.1177/0149206308321554>
- Parker, S. K., Wang, Y., & Liao, J. (2019). When is proactivity wise? A review of factors that influence the individual outcomes of proactive behavior. *Annual Review of Organizational Psychology and Organizational Behavior*, 6(1), 221–248. <https://doi.org/10.1146/annurev-orgpsych-012218-015302>
- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91(3), 636–652. <https://doi.org/10.1037/0021-9010.91.3.636>
- Pham, T. N. M. (2021). The relationship between human resource management practices, work engagement and employee behavior: A case study in Vietnam. *Journal of Asian Finance, Economics and Business*, 8(4), 1003–1012. <https://doi.org/10.13106/jafeb.2021.vol8.no4.1003>
- Polit, D. F., & Beck, C. T. (2010). Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11), 1451–1458. <https://doi.org/10.1016/j.ijnurstu.2010.06.004>
- Rolstad, S., Adler, J., & Rydén, A. (2011). Response burden and questionnaire length: Is shorter better? A review and meta-analysis. *Value in Health*, 14(8), 1101–1108. <https://doi.org/10.1016/j.jval.2011.06.003>
- Rousseau, V., & Aubé, C. (2018). When leaders stifle innovation in work teams: The role of abusive supervision. *Journal of Business Ethics*, 151(3), 651–664. <https://doi.org/10.1007/s10551-016-3258-8>
- Saks, A. M., Gruman, J. A., & Cooper-Thomas, H. (2011). The neglected role of proactive behavior and outcomes in newcomer socialization. *Journal of Vocational Behavior*, 79(1), 36–46. <https://doi.org/10.1016/j.jvb.2010.12.007>
- Smithikrai, C. (2019). Antecedents and consequences of work engagement among Thai employees. *Journal of Behavioral Science*, 14(3), 14–31. <https://so06.tci-thaijo.org/index.php/IJBS/article/view/189001>
- Smithikrai, C. (2022). Antecedents and consequences of proactive work behavior among Thai employees. *Journal of Behavioral Science*, 17(1), 43–57. <https://so06.tci-thaijo.org/index.php/IJBS/article/view/254132>
- Smithikrai, C., & Suwannadet, J. (2018). Authentic leadership and proactive work behavior: Moderated mediation effects of conscientiousness and organizational commitment. *Journal of Behavioral Science*, 13(2), 94–106. <https://so06.tci-thaijo.org/index.php/IJBS/article/view/136333>

- Spychala, A., & Sonnentag, S. (2011). The dark and the bright sides of proactive work behaviour and situational constraints: Longitudinal relationships with task conflicts. *European Journal of Work and Organizational Psychology*, 20(5), 654–680. <https://doi.org/10.1080/1359432X.2010.487646>
- Subar, A. F., Ziegler, R. G., Thompson, F. E., Johnson, C. C., Weissfeld, J. L., Reding, D., Kavounis, K. H., & Hayes, R. B. (2001). Is shorter always better? Relative importance of questionnaire length and cognitive ease on response rates and data quality for two dietary questionnaires. *American Journal of Epidemiology*, 153(4), 404–409. <https://doi.org/10.1093/aje/153.4.404>
- Syamsudin, N., Eliyana, A., Nurdin, N., Sudrajat, A., Giyanto, B., Emur, A. P., & Zahar, M. (2022). Are job satisfaction and role breadth self-efficacy the links to proactive work behavior? *Heliyon*, 8(1), e08710. <https://doi.org/10.1016/j.heliyon.2021.e08710>
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 41(1), 108–119. <https://doi.org/10.2307/256902>
- Varela, J. A., Bande, B., Del Rio, M., & Jaramillo, F. (2019). Servant leadership, proactive work behavior, and performance overall rating: Testing a multilevel model of moderated mediation. *Journal of Business-to-Business Marketing*, 26(2), 177–195. <https://doi.org/10.1080/1051712X.2019.1603417>
- Walford, G. (2005). Research ethical guidelines and anonymity. *International Journal of Research and Method in Education*, 28(1), 83–93. <https://doi.org/10.1080/01406720500036786>
- Welbourne, T. M., Johnson, D. E., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based measure. *Academy of Management Journal*, 41(5), 540–555. <https://doi.org/10.5465/256941>
- Worawattanaparinya, S. (2020). Mediation role of intrinsic motivation in transmitting the effect of self-efficacy to proactive work behavior of generation Y operation staffs in the automotive industry in Rayong province, Thailand. *Academy of Strategic Management Journal*, 19(5), 1–11. <https://www.abacademies.org/articles/mediation-role-of-intrinsic-motivation-in-transmitting-the-effect-of-selfefficacy-to-proactive-work-behavior-of-generation-y-opera-9705.html>
- Wu, C. H., Deng, H., & Li, Y. (2018). Enhancing a sense of competence at work by engaging in proactive behavior: The role of proactive personality. *Journal of Happiness Studies*, 19(3), 801–816. <https://doi.org/10.1007/s10902-016-9827-9>
- Wu, C. H., & Parker, S. K. (2013). Thinking and acting in anticipation: A review of research on proactive behavior. *Advances in Psychological Science*, 21(4), 679–700. <https://doi.org/10.3724/sp.j.1042.2013.00679>
- Wu, C. H., & Parker, S. K. (2017). The role of leader support in facilitating proactive work behavior: A perspective from attachment theory. *Journal of Management*, 43(4), 1025–1049. <https://doi.org/10.1177/0149206314544745>
- Yu, C. (2023). *Private sector set to drive economic growth*. Chinadaily.Com.Cn. <https://www.chinadaily.com.cn/a/202303/09/WS64091a4ba31057c47ebb32c3.html>
- Zhang, H. (2020). A review and prospects of literature on proactivity. *Open Journal of Social Sciences*, 08(2), 211–230. <https://doi.org/10.4236/jss.2020.82017>
- Zhang, M. J., Law, K. S., & Wang, L. (2020). The risks and benefits of initiating change at work: Social consequences for proactive employees who take charge. *Personnel Psychology*, 74(4), 721–750. <https://doi.org/10.1111/peps.12423>