



The Impact of Positive Leadership Styles on Organisational Innovative Behaviour: A Thematic Review

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Abstract

Organisations that want to succeed in a volatile environment must reassess their goals to align their operational models with global forces, technological revolutions, crises, and dynamic market conditions. Leadership and innovation have been identified as powerful impelling forces for the survival, success, and competitiveness of firms in this environment. However, a very limited number of studies have looked into how positive leadership styles (PLS) can influence innovative behaviour (IB) in organisations. Articles published in English between 2016 and 2020 that studied the impact of PLS on IB were searched using the Web of Science (WoS) and Scopus databases. Using ATLAS, this systematic review will synthesise research on the impact of PLS on IB. A total of 129 codes characterising PLS styles on IB were identified in 65 peer-reviewed journal publications and grouped into four themes, which are global pressures, sustainability, uncertainty, and competitiveness challenges. The findings revealed patterns and trends on the effects of PLS on IB. This research contributes to future studies by analysing patterns and trends that may encourage and drive employee, leader, team, and organisational IB strategies.

1320

Key Words: leadership styles, innovative behaviour, organisational innovation

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Introduction

Innovative behaviour (IB) has become increasingly significant (Afsar et al., 2019; Woods et al., 2018) and an essential prerequisite for organisational survival due to the changing economic environment, globalisation, and expanding conflicting demands (Afsar et al., 2019; Hon & Lui, 2016; Kim & Koo, 2017; Li & Hsu, 2016). Systems thinking dynamics are crucial for the survival, growth, and competitiveness of companies (Shipton et al., 2006; Stanescu et al., 2020). Organisations are continually challenged and are competing with one another, necessitating a greater need for flexibility and adaptation to the complex international environment, as well as a greater demand for innovation than ever before. As a result, many businesses are increasingly interested in determining the characteristics that can predict and increase their employees' IB (Agarwal, 2014; Scott &

Bruce, 1994; Stanescu et al., 2020). In today's vibrant and hyper-competitive business climate, innovation is a critical basis for organisational performance, competitive advantage, and long-term success (Amankwaa et al., 2019; Hughes et al., 2018; Iqbal et al., 2020; Newman et al., 2017). Employee IB is also known as the creation and implementation of new and valuable ideas (Iqbal et al., 2020; Scott & Bruce, 1994). According to existing research, collaboration is crucial to organisational innovation. As a result, it is critical to comprehend the factors that influence employees' IB (Cai et al., 2018; Iqbal et al., 2020). The impact of managers' leadership styles in supporting employees' creativity and IB has been well recognised by a profusion of research (Afsar et al., 2014; Iqbal et al., 2020; de Jong & Hartog, 2007; Xu et al., 2017). In order to keep a business going, organisations look into many ways to build a sustainable advantage. Opoku et al., (2019) and Wikström (2010)

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have recognised innovation as a sustainable option since it enables the development of strategic tools to assist management in organising operations. This has prompted scholars and companies to seek out new and innovative ways to encourage and motivate IB among followers and employees (Jong & Hartog, 2010; Opoku et al., 2019). In order to foster innovative behaviour in an extensive knowledge-based work context, the function of leadership has been widely recognised and has attracted a lot of attention from human resource practitioners and academic scholars (Iqbal et al., 2020; Mittal & Dhar, 2015). Leadership is a catalyst for promoting innovative behaviour (Masood & Afsar, 2017) and creative outcomes (Atitumpong & Badir, 2018). According to Newman et al. (2018), complementary leadership styles have a considerable impact on employees' innovative behaviour. Due to existing traditional leadership approaches that create emotions of powerlessness, employees become incompetent to use their full innovative potential and become less productive (Saeed et al., 2019). As a result, leaders have a variety of responsibilities in nurturing creative behaviour through their initial framework, assistance, leadership, motivating, and promoting behaviour (Opoku et al., 2019). The value of a leadership style in motivating employees to be creative and inventive has been recognised by a substantial amount of empirical study (Iqbal et al., 2020). Despite the theoretical importance of PLS as a driver of innovative behaviour, little attention has been paid to how PLS's underlying mechanisms influence the inventive behaviours of individuals, teams, and organisations. Furthermore, while previous literature has explored many concerns, published review papers that discuss PLS and IB issues are still lacking. As a result, the main goal of this study is to address concerns that have been highlighted in PLS and IB publications from 2016 to 2020. Thus, the following research question is formulated. What are the most common concerns about PLS and IB that have been raised in publications from 2016 to 2020?

Methodology

Since a thematic analysis technique was used for the literature study, this paper used ATLAS.ti 22 software as the tool, as described by Zairul (2022). Thematic analysis, according to Braun and Clarke (2013), is the process of detecting patterns and

developing themes through extensive reading on a subject. The next stage was to determine the pattern and create a category in order to comprehend the PLS publication pattern that contributed to the IB. This study used two comprehensive search engines, the Web of Science (WoS) and Scopus databases, and a subject search to find and retrieve academic journals that have published important works on PLS and IB from year 2016 to 2020. The WoS and Scopus databases were chosen because they provide the most complete databases for peer-reviewed papers with advanced filtering capabilities (AlEssa & Durugbo, 2021; Oladinrin et al., 2021). Apart from being a key archive for most research output, WoS is preferred because of its superior accuracy over other search engines. WoS also has the most reliable download function (Chen et al., 2008; Oladinrin et al., 2021) and provides more accurate data centralisation findings (Jin et al., 2017; Oladinrin et al., 2021). On the other hand, Scopus includes over 75 million records, 24,600 titles, and 5000 publishers in subjects including health and science, biological sciences, physical sciences, and social sciences. Scopus provides extensive analytical tools and generates relatively accurate citation searches (AlEssa & Durugbo, 2021). In the first step, a systematic review of research articles was carried out to identify the impact of PLS on IB. If accessible, published articles were extracted from the WoS using the keyword "leadership" OR "positive leadership" AND "innovative behaviour" OR "innovative behavior" as well as Scopus using the keyword TITLE-ABS-KEY ("leadership" OR "positive leadership" AND "innovative behaviour" OR "innovative behavior") AND PUBYEAR- 2016 to 2020. For quality and to be in line with related reviews of PLS and IB, the review sets inclusion criteria for academic journal publications in English. Thus, the review excludes conference papers, book chapters, reports, etc. Setting inclusion and exclusion criteria is a key tenet of the systematic review articles. The initial search resulted in 223 articles in the Scopus database, 256 articles in the WoS database, and 48 duplications. As this review is limited to peer-reviewed journals, 366 publications were removed due to inconclusive results and anecdotes, overlaps, or no discussion regarding PLS and IB. Therefore, the final papers to be reviewed were down to 65 articles (Table 1).

1321



Table 1. Search strings phase from Web of Science and Scopus databases

Web of Science	Search Strings	TITLE-ABS-KEY (leadership AND innovative AND behaviour OR innovative AND behavior) AND PUBYEAR > 2015 AND PUBYEAR < 2021 AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016)) AND (LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "PSYC") OR LIMIT-TO (SUBJAREA , "ECON") OR LIMIT-TO (SUBJAREA , "DECI"))		
	Filtering	Searching: 175 articles	Rejected: 174 articles	Accepted: 1 article
Scopus	Search Strings	(AK=(Leadership AND Innovative Behavior OR Innovative Behaviour)) AND LANGUAGE: (English) AND DOCUMENT TYPES: (Article) Refined by: DOCUMENT TYPES: (ARTICLE) AND WEB OF SCIENCE CATEGORIES: (MANAGEMENT OR BUSINESS OR PSYCHOLOGY APPLIED) Timespan: 2016-2020. Indexes: SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, ESCI.		
	Filtering	Searching: 208 articles	Rejected: 158 articles	Accepted: 50 articles
Web of Science-Scopus	Duplication	Searching: 48 articles	Rejected: 34 articles	Accepted: 14 articles

The articles were uploaded into the ATLAS.ti 22 software as primary documents, and then each paper was grouped into author, issue number, periodical, publisher, volume, and year of publication (Figure 1). As a result, the articles may be analysed according to the year they were published, as well as the debate trend. The sorting of the 65 articles was made considerably more methodical and exact based on the functionality of ATLAS.ti 22. Some approaches to thematic review mirrored those used in qualitative research coding. The procedure is frequently viewed as fragmenting

and lowering facts to the point where the dialectic relationship between reading and writing is 1322 obscured. By integrating the original coding into "themes", ATLAS.ti 22 aided the process of thematic review. One of the most significant aspects of thematic assessment is the ability to take a step back from the raw data and ideas of the initial code to the final theme for the purpose of interpretation. A theme review paper's fundamental business is iterative procedures of switching back and forth between analytic tasks and technological tools. The analytic task of reflection occurs throughout the analysis.

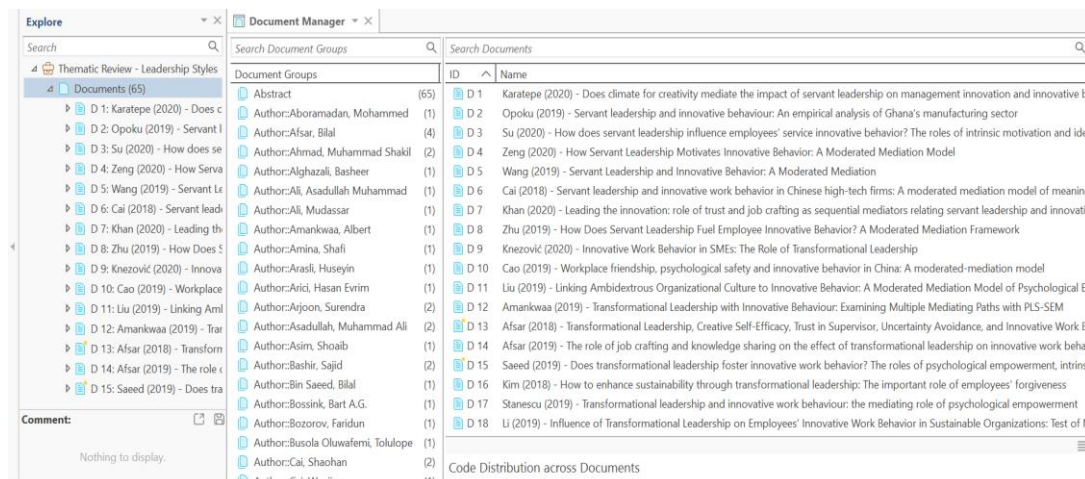


Figure 1: Documents extracted from Mendeley metadata into ATLAS.ti 22



Results And Discussion

Patterns in positive leadership styles-based publications were difficult to discern because database searches were static and the terms "leadership" or "positive leadership" and "innovation behavior" or "innovative behavior" were rarely used. The detected 65 publications in journals like the European Journal of Innovation Management, Leadership and Organization Development Journal, Sustainability (Switzerland), and others have cited these research threads in one way or another (Table 2). As a follow-up to this critical analysis, IB and leadership styles are looked at in light of the most important mediator and moderator variables.

Journals

In total, 40 peer-reviewed journals have published 65 articles on PLS and IB. Sustainability (Switzerland) had 7 articles out of 65 in 2018, making it the most prominent in the field. The European Journal of Innovation Management and Leadership, which published 5 papers in the previous 5 years, had made a substantial

contribution to PLS and IB research. Personnel Review had 2 articles, followed by Organization Development Journal with 4 articles. Table 2 shows a rise in the number of publications from 2016 to 2020. In 2016, just a small number of studies had addressed PLS and IB. The journals were divided into five major categories namely, Human Resource Management and Leadership (21 articles), Psychology (9 articles), Medical and Health Sciences (5 articles), Hospitality (3 articles), and Technology (3 articles), and the rest were in other categories (2 articles). In this research, it was discovered that 21 articles have been published in journals regarding management and leadership disciplines, while 19 articles have been published in publications that are not linked to management and leadership fields. According to the results of this study, the number of publications in the management and leadership disciplines was well balanced (52.5%) against the number of publications in non-management and leadership fields (47.5%) from the year 2016 to 2020. This demonstrates that research on PLS and IB are not just prevalent in the management and leadership domains, but also extends across a wide range of disciplines.

Table 2: Articles reviewed based on journals

No.	Journal Article	2016	2017	2018	2019	2020
1	Asia Pacific Education Review				1	
2	Asia Pacific Journal of Human Resources				2	
3	Asia Pacific Journal of Management					1
4	Baltic Journal of Management					1
5	BMC Health Services Research					1
6	Chinese Management Studies				1	1
7	Current Issues in Tourism	1				
8	Current Psychology					1
9	Economic Research-Ekonomska Istrazivanja				1	
10	Educational Management Administration and Leadership					1
11	Employee Relations					1
12	European Journal of Innovation Management					5
13	Frontiers in Psychology			1	2	
14	International Journal of Contemporary Hospitality Management					1
15	International Journal of Environmental Research and Public Health				1	1
16	International Journal of Health Planning and Management			1		
17	International Journal of Human Resource Management		1			
18	International Journal of Manpower				1	



19	Journal of Applied Behavioral Science			1		
20	Journal of Business Research			1	1	
21	Journal of Creative Behavior			1		1
22	Journal of Happiness Studies		1			
23	Journal of Knowledge Management				1	1
24	Journal of Leadership and Organizational Studies		1			
25	Journal of Management and Organization			1		
26	Journal of Managerial Psychology				1	
27	Journal of Nursing Management				1	1
28	Journal of Psychology: Interdisciplinary and Applied			1		
29	Kybernetes				1	
30	Leadership and Organization Development Journal				1	4
31	Nursing Inquiry		1			
32	Personnel Review				1	2
33	Psychology Research and Behavior Management					1
34	Public Administration Review		1			
35	Public Management Review				1	
36	SAGE Open					1
37	Sustainability (Switzerland)			2	4	1
38	Technovation					1
39	Total Quality Management and Business Excellence				1	
40	Tourism Management		1			
	Total	1	6	9	22	27

Themes

In an iterative review process, 65 research articles have been screened for relevance. Consistency in the resulting sub-categories was achieved through comparisons for similarities and differences. Many studies have looked at many variables connected to PLS and IB, and this review has identified those studies. PLS and IB research articles have been grouped together based on their methodology. In addition to the 129 codes, 4 themes were identified as factors affecting IB, which are referred to as employee and job oriented, leader centred, team centred, and organisation centred. When it comes to PLS and IB concepts, it is important to think outside the box, to constantly seek out new ways to do things, to look for new technologies, use different

work strategies and methods, and make sure resources are available so that new ideas may become reality. A considerable amount of study has been done on PLS and IB's ability to improve organisational effectiveness, performance, and employee happiness because of this knowledge. Factors such as individual personality traits, team features, team leader factors, organisational components, relationships within the company, and different techniques have been investigated thus far. Factors listed above have been found to be significant triggers of IB (Axtell et al., 2006; Janssen, 2000; Knezović & Drkić, 2020; Pieterse et al., 2010; Scott & Bruce, 1994). As a result, factors affecting IB were divided into four broad categories which include employees, leaders, teams, and organisations (Table 3).



Table 3: The theme according to year

No.	Focus Group	2016	2017	2018	2019	2020	Total
1.	Employee centred	1	6	6	18	24	55
2.	Leader centred	1	2	3	5	9	20
3.	Team centred				3	1	4
4.	Organisation centred		1	1		6	8
	Total	2	9	10	26	40	87

Positive Leadership Styles (PLS)

The pattern was examined using the year and type of PLS (Figure 2). Publications from 2016 to 2020 showed increasing patterns in research regarding PLS and IB. Within the time period studied, the transformation leadership style had the most research with 21 studies, followed by the servant leadership style with 10 studies. Inclusive leadership, entrepreneurial leadership, and benevolent leadership also made the top 5 list of 22 PLS that contributed to IB's organisational studies. Employees' IB has long been recognised for its ability to inspire company innovation and success (Mytelka & Smith, 2002; Stanescu et al., 2020). Ramamoorthy et al. (2005) discovered that in order

to achieve the goal of innovation, firms must work on their people. Both researchers and practitioners recognise the growing significance that leadership plays in creating individuals to innovate in today's work environment. Kahai et al. (2003) investigated how different types of leadership influence IB and discovered that leadership practises have a demonstrable influence on this component of employee' behaviour. Appropriate leadership style has the potential to promote IB by encouraging people and creating a favourable environment for the development of their creative and innovative skills, which finally leads to greater innovation capabilities and superior competitive advantages for the firm (Afsar et al., 2019; Patiar & Wang, 2016).

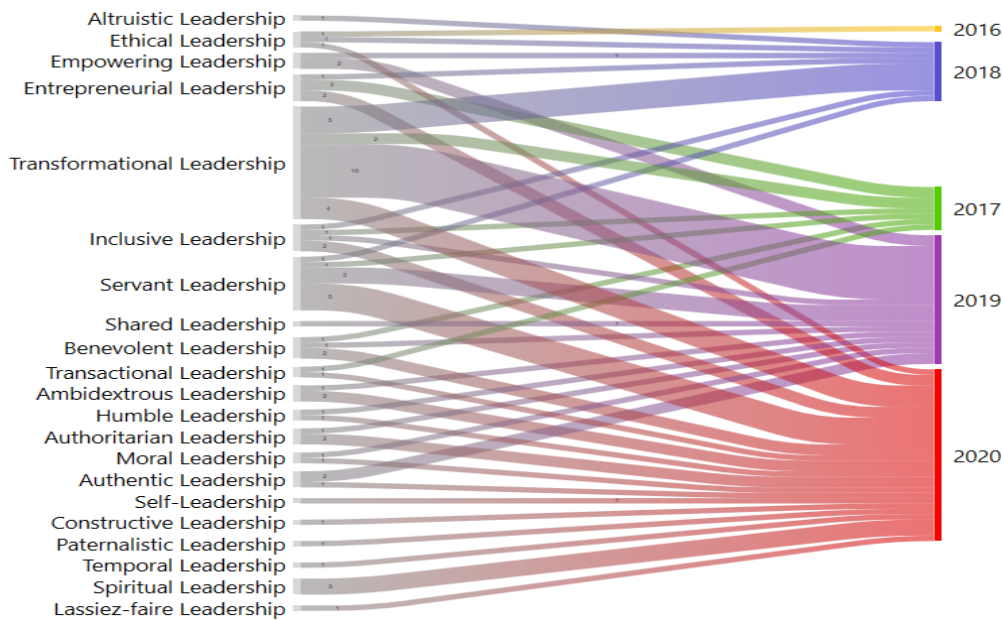


Figure 2: Distribution of articles according to PLS and year

Countries

Overall, 23 nations have undertaken studies on PLS utilising a variety of variables between the year 2016 and 2020. Table 4 shows a complete breakdown of the countries. From a geographical aspect, the most number of studies have been conducted in China (26 studies), followed by

Pakistan (15 studies), where the western constructs of PLS and IB were evaluated to determine their reliability and validity across cultures. Turkey came in with 3 studies, followed by the United States. In contrast, the United States has only published one research project in the year 2020, even though it is the country where most of the PLS and IB theories were developed. Therefore, it can be assumed that



PLS and IB theories are more suited to countries where the power distance between leaders and employees is modest, as opposed to countries where it is high. At this juncture, Grošelj et al. (2020), Saeed et al. (2019), and Newman et al. (2017) had conducted four empirical research in different nations at the same time. There has been very little empirical research undertaken on this link, and more decisive research is required in order to produce in-depth results and cross-cultural validation of the findings (Khan et al., 2020). PLS and IB studies are becoming increasingly popular in Asian countries (52 studies), including China, Pakistan, Turkey, Bangladesh, India, Palestine, the

Islamic Republic of Iran, South Korea, Taiwan, and Vietnam. This was most likely facilitated by their shared language and cultural and historical links. From 2016 to 2020, European countries (13 studies), Africa (2 studies), America (1 study), and Oceania (1 study) accounted for the remaining 23.6%. Southeast Asia has showed potential for future research, with only one study completed in Vietnam. The Southeast Asian region includes 11 independent countries in an Asian sub-region, namely Brunei, Cambodia, East Timor, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. ASEAN is culturally and ethnically diverse (Hosshan et al., 2020; Romli et al., 2017).

Table 4: The distribution of articles according to country and year

No.	Countries	2016	2017	2018	2019	2020	Total
1.	Australia		1				1
2.	Bangladesh				1		1
3.	Bosnia & Herzegovina					1	1
4.	Canada		1			1	2
5.	China		2	3	9	12	26
6.	Denmark				1		1
7.	Europe					1	1
8.	Ghana				2		2
9.	India				1		1
10.	Netherlands				1	1	2
11.	Norway				1	1	2
12.	Pakistan		2	2	2	9	15
13.	Palestine					1	1
14.	Poland				1		1
15.	Republic of Iran			1			1
16.	Romania					1	1
17.	South Korea			1	1		2
18.	Spain			1	1		2
19.	Taiwan				1	1	2
20.	Turkey	1	1			1	3
21.	United Kingdom		1			1	2
22.	United State of America					1	1
23.	Vietnam		1				1
	Total	1	9	8	22	32	72

Sectors

Based on the review of 65 articles, it can be concluded that both the private and public sectors are involved in PLS and IB studies. Figure 3 summarises the procedures followed and the results of each investigation. The findings demonstrate that empirical research conducted in the private sector

has become increasingly dominant with 80 studies compared to only 16 studies conducted in the public sector. From this finding, scholars in the future will be able to look into how PLS affects innovative behaviour in both the public and non-profit sectors. Newman et al. (2017) discovered that further comparative studies are needed to analyse the



relative effectiveness of various leadership styles in the non-profit and for-profit sectors. Leaders should think about how they can change their style to fit the

needs of different types of businesses so that they can have the most positive effect on the attitudes and actions of their employees.

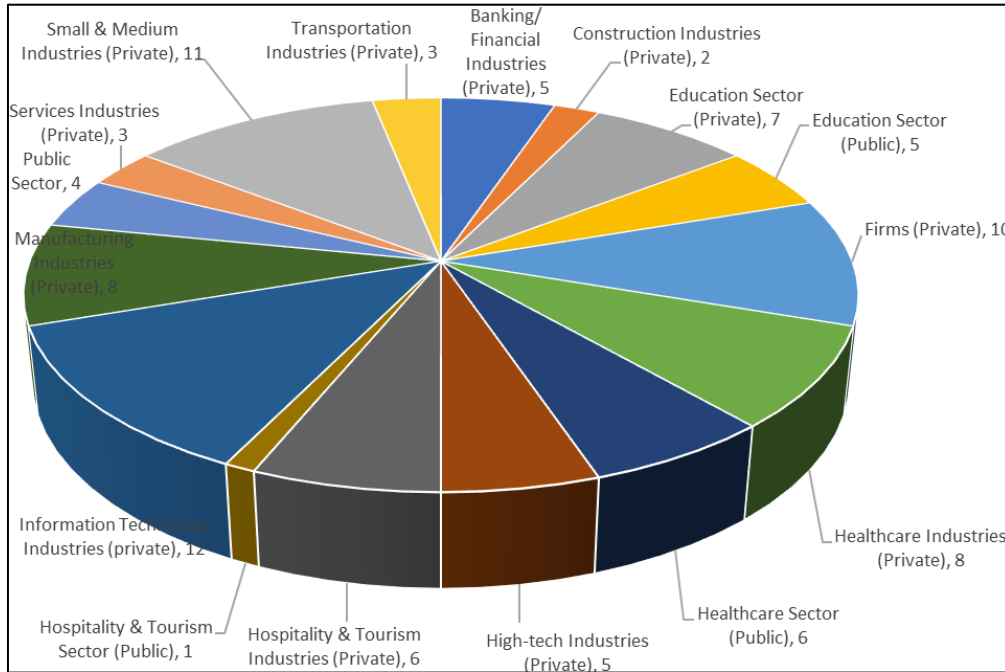


Figure 3: The distribution of articles according to sector

Theory

The year and theory were used to analyse the pattern (Table 5). From a theoretical standpoint, the current research attempted to uncover relevant constructs, underpinnings, and frameworks employed in the most condensed literature on PLS and IB, even if they were not explicitly acknowledged by single investigations. All publications were constructed on the theory, which was frequently combined with theories on different leadership styles or antecedents, outcomes, mediators, and moderators. There is no single theory that dominates PLS and IB research. Furthermore, the majority of the work clearly used more than one theoretical background. The Social Exchange Theory (SET) was the most frequently observed theory (13 out of 81). Blau (1964) defined SET as the voluntary activities of people motivated by the rewards they are expected to bring out to others. It is founded on the primary concept that the exchange of social and material resources is a fundamental kind of human interaction (Canavesi & Minelli, 2021). Transformational Leadership Theory (7 studies), Self Determination Theory (5 studies), Social Cognitive Theory (5 studies), and Social

Learning Theory (5 studies) comprised the top five research theories. The most theoretically apparent factors which are competence, relatedness, and autonomy are considered by 5 out of 81 theories to represent the Self-Determination Theory's (SDT) fundamental psychological demands. SDT is an empirically tested theory of human behaviour and personality development that seeks to uncover the social-contextual factors that encourage or inhibit motivation based on the fulfilment of fundamental psychological needs (Deci et al., 2017). In particular, as leaders prioritise the development and advancement of their followers, the followers would feel obligated to reciprocate those positive leader behaviours with positive follower behaviours of their own (Eva et al., 2019). While SET has provided a significant foundation for PLS leadership research, the conceptualization of PLS lends itself to behavioural theories that transform their followers' mindsets and behaviours over the long term, as opposed to seeking a short-term quid pro quo from their followers' argument that leaders are likely to transform their followers into leaders themselves (Eva et al., 2019).



Table 5: The distribution of articles according to research theory and year

No.	Theory	2016	2017	2018	2019	2020	Total
1	Affective Events Theory					1	1
2	Ambidextrous Leadership Theory				1	1	2
3	Authentic Leadership Theory				1	1	2
4	Broaden & Build Theory			1			1
5	Cognitive Evaluation Theory					1	1
6	Componential Theory of Creativity				1		1
7	Conservation of Resources Theory				1	3	4
8	Entrepreneurial Leadership Theory					1	1
9	Full Range of Leadership Theory					1	1
10	Hierarchical of the Distance Theory					1	1
11	High-quality Connections Theory					1	1
12	Humble Leadership Theory				1		1
13	Intrinsic Motivation Theory					1	1
14	Job-Demand and Resources Theory				1	2	3
15	Leader-Member Exchange Theory		1	1			2
16	Leadership Contingency Theory			1			1
17	Organisational Creativity Theory					1	1
18	Psychological Empowerment Theory		1				1
19	Resource Based View Theory				1		1
20	Self Determination Theory				3	2	5
21	Self-Concept Leadership Theory					1	1
22	Self-Efficacy Theory				1	1	2
23	Self-Leadership Theory					1	1
24	Servant Leadership Theory				1	1	2
25	Situational Leadership Theory			1			1
26	Social Cognitive Theory			1	2	2	5
27	Social Exchange Theory			1	5	7	13
28	Social Identity Theory		1		1	1	3
29	Social Learning Theory		1		1	3	5
30	Social Network Theory				1		1
31	Spiritual Leadership Theory					2	2
32	Strengths-Based Leadership Theory					1	1
33	Theory of Creativity					1	1
34	Theory of Planned Behaviour	1	1				2
35	Trait Activation Theory			1			1
36	Transformational Leadership Theory		1	2	3	1	7
37	Upper Echelons Theory				1		1
	Total	1	6	9	26	39	81

Level of Analysis

Table 6 contains 35 studies at the employee level, 23 of which solicited studies from employees and supervisors to study dyadic relationships. It was discovered that only 4 empirical research in each

group examined the dyadic connections between employee and middle manager (Hansen & Pihl-Thingvad, 2019; Kung et al., 2020; Miao et al., 2017; Wang et al., 2020) and supervisor and middle manager (Kung et al., 2020; Mokhber et al., 2018; Newman et al., 2018; Su et al., 2020). Only two



empirical research, conducted by Oluwafemi et al. (2020) and Khan et al., (2020) have demonstrated the interaction between PLS and IB from the perspective of middle managers. There is evidence that PLS can promote IB outcomes through multiple mediating and moderating processes discovered at the employee, supervisor, and middle manager levels. According to empirical studies, the benefits of leadership flow to the bottom line and influence outcomes at numerous organisational levels (Bavik, 2019; Bavik et al., 2017). Furthermore, Ling et al. (2016) found that service-oriented behaviour was positively influenced by middle-level leadership. PSL and IB have seen a proliferation of research in recent years due to their comprehensive approach, broad emphasis, and vital role in effecting both employee and supervisory levels. Middle and lower-level managers have major duties in the organisation. Middle-level managers are a group of

people who operate behind the highest management levels and are directly responsible for the work of lower-level managers. They may have direct accountability for other middle and lower-level managers (Mokhber et al., 2018). However, middle-level managers' attitudes toward innovation are crucial for individual IB. When middle-level managers' measurements of the work environment do not match their expectations of the optimal condition, they view the work environment as in need of adjustment to stimulate innovation (Kör et al., 2020). The middle-level manager's judgement of the work setting is assumed to be the trigger of IB and as a change agent, which is a person who generates ideas or promotes an idea for adoption by another person or group (Kör et al., 2020). Due to the small number of empirical studies, future researchers may study the effects of PSL on IB with relevant mediators on middle managers in greater depth.

Table 6: The distribution of articles according to level of analysis and year

No.	Level	2016	2017	2018	2019	2020	Total
1	Employee		2	4	11	18	35
2	Employee - Supervisor	1	3	3	10	6	23
3	Employee - Middle Manager		1		1	2	4
4	Supervisor - Middle Manager			2	1	1	4
5	Middle Manager				1	1	2
	Total	1	6	9	24	28	68

Qualitative Findings

An increasing number of articles have discussed global forces, including a rapidly changing global environment, unstable markets, or shifting customer expectations (Opoku et al., 2019), as well as a dynamic and competitive worldwide environment (Cai et al., 2018). Organisations are being forced to innovate due to technological advancements and competitive environments, according to Nazir et al. (2020a). As a result of the fierce competition in the global marketplace (Newman et al., 2017), an organisation's long-term viability depends on its ability to innovate. The pandemic's effect on environment uncertainty and competitiveness problems have made the responsibilities of leadership and IB more important for today's organisations to survive and thrive (Chongvisal, 2020). After conducting the research inquiry, the findings were re-examined in light of new developments in this market category. Using the highlighted keywords in ATLAS.ti 22, the search

through the data has identified these four main themes.

Global Force Challenges

Economic instability and demographic swings in modern welfare states require changes in the public sector, and innovation is frequently viewed as a solution to current problems (Hansen & Pihl-Thingvad, 2019). With the development of sophisticated new technology, commercial competition is expanding (Javed et al., 2020; Javed et al., 2018; Kong et al., 2019). Meanwhile, ever-changing client needs push businesses to constantly develop their products and services (Javed et al., 2020; Javed et al., 2018; Michaelis et al., 2009; Pundt et al., 2010; Younas et al., 2018). Employee IB received significant organisational consideration as a result of rapidly changing consumer needs caused by economic, technological, and cultural changes in the global market (Nazir et al., 2020a). In addition to the identification and execution of new ideas,



innovation must improve a company's products and services in order to suit current and future client needs (Javed et al., 2020; Younas et al., 2018). Under very competitive business conditions, innovation has become a crucial tool for companies to manage complicated transitions (Yang et al., 2020). Innovation is essential to the organisation's survival in the global marketplace (Newman et al., 2017). The development reflects an increasingly dynamic environment in which the ability to develop and implement new products and services gives an organisation a competitive advantage over its rivals (Opoku et al., 2019). In order to sustain its technical advantage in the setting of the global environment, policymakers, practitioners, and business executives are attempting to build procedures that

encourage employees to use IB and incorporate more innovation into businesses (Huang et al., 2017). The IB of employees is critical in promoting transformational performance (Yang et al., 2020). Organisations operating in today's dynamic and complicated environment must not only adapt to these changes, but also positively respond to flourishing innovation (Nazir et al., 2020a). As a result, new advancements in leadership are required to be inventive and handle the dynamic changes in today's global economy (Kör et al., 2020; Lappalainen, 2015). According to Khan et al. (2020), the impact of leadership styles on employees is to make them inventive in order for them to compete effectively in the global context. Figure 4 depicts the ATLAS.ti 22 network analysis of global force challenges.

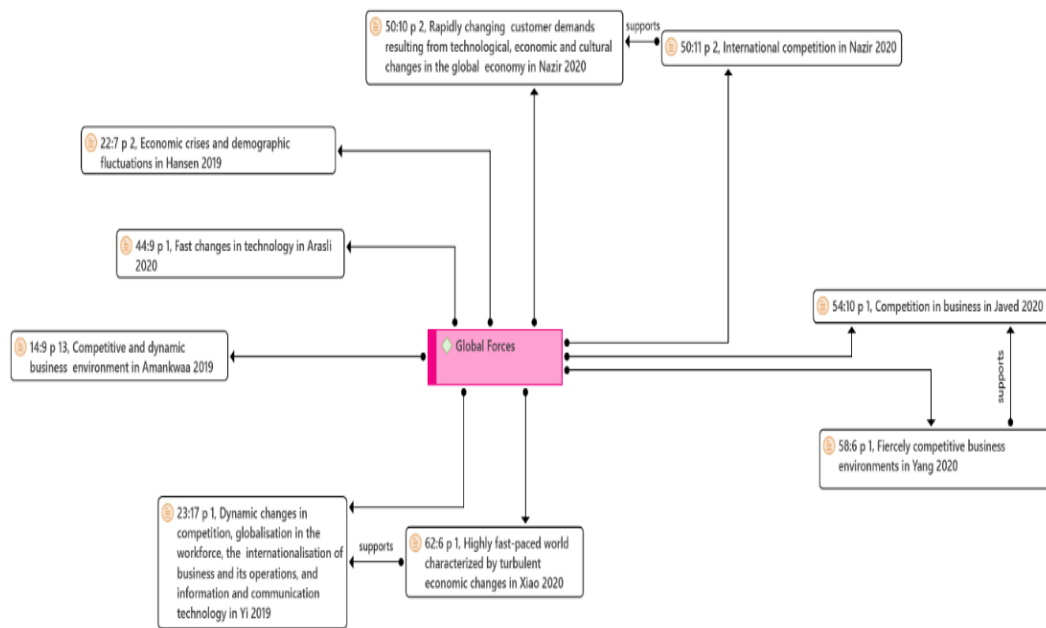


Figure 4: A network view on global force challenges

Sustainability Challenges

IB is a major component that management must take into consideration in order to ensure the long-term viability of the firm (Li et al., 2019). Many organisations in today's corporate contexts place a high focus on innovation as a strategic priority (Amankwaa et al., 2019; Slater et al., 2014). The reality is that in order to fulfil this aim, organisations must consciously participate in creative modes of service delivery in order to remain relevant, maintain competitive advantage, and experience long-term growth and survival (Amankwaa et al., 2019; Janssen & Van Yperen, 2004). Employees' ability to think creatively is critical to the success

and longevity of an organisation (Anderson et al., 2014; Nazir et al., 2020b). This increased focus has prompted organisational executives to encourage employee creativity while also exploring novel methods of stimulating staff creativity (Hon, 2012; Hon & Lui, 2016; Nazir et al., 2020b). Workplace innovation is concerned with extremely competitive settings in which firms and their employees are required to engage in IB to ensure the survival and long-term viability of these organisations. In fact, not only for-profit companies, such as business based organisations, but also non-profit organisations, such as government agencies, must innovate in order to survive (Thurlings et al., 2015; Zeng & Xu, 2020). In order to keep a competitive



advantage over their rivals, businesses must develop the latest inventions in the shortest time possible and deliver them on time to customers (Xiao et al., 2020). According to Zeng and Xu (2020), the majority of workplace innovation is focused on highly competitive scenarios in which companies and employees are required to engage in IB in order

to ensure the survival and viability of their respective organisations. Despite this, Opoku et al. (2019) argued that the empirical studies are equivocal and point to the need for further research on the impact of leadership in determining IB performance. The ATLAS.ti 22 network study of sustainability challenges is depicted in Figure 5.

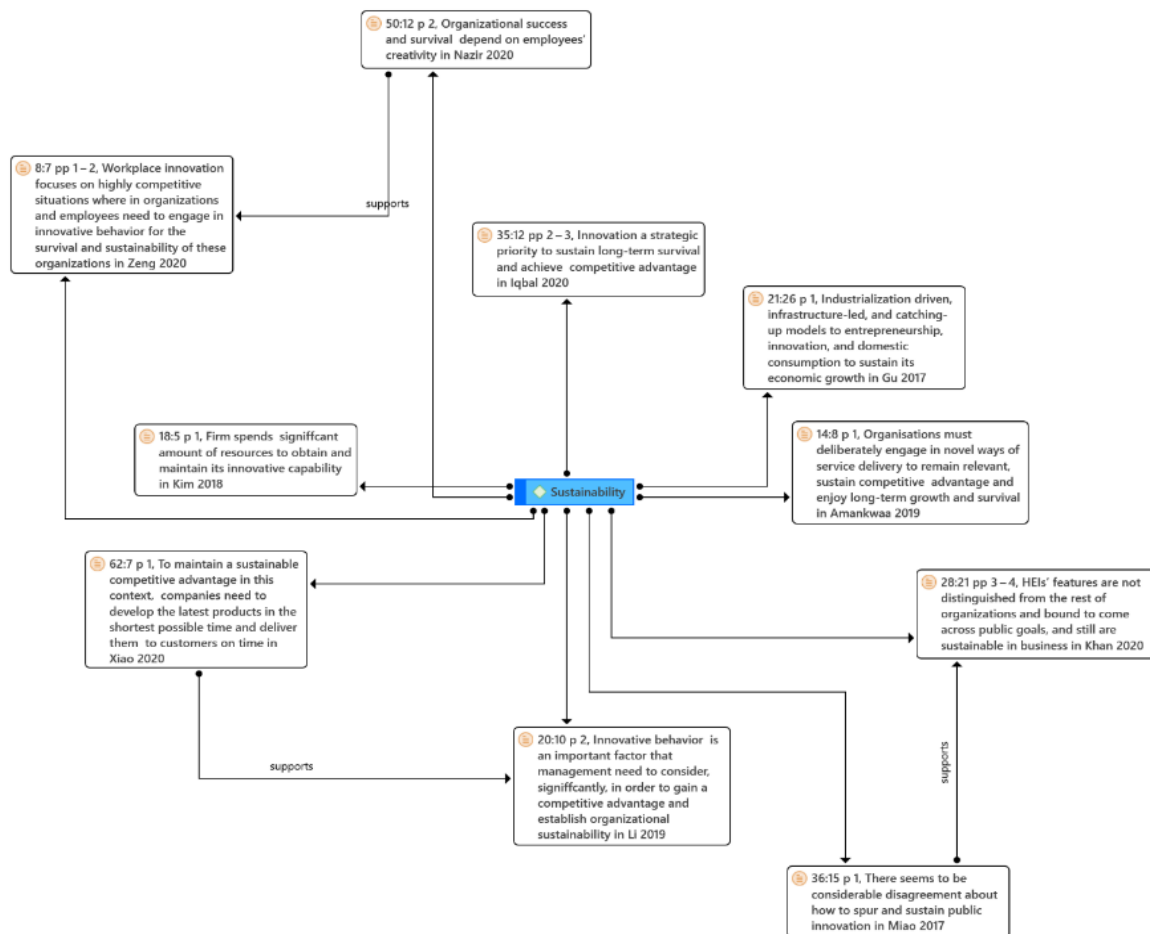


Figure 5: A network view on sustainability challenges

Uncertainty Challenges

In a market characterised by unpredictability and intense rivalry, management should revise employee responsibilities and implement modifications that will result in improved decision-making and new managerial procedures (Afsar & Masood, 2018). In response to increases in uncertainty and environmental complications during the 2008 financial crisis, the Danish parliament chose to concentrate on bolstering the innovative capacities of municipal service-delivery units. This policy was implemented by encouraging managers at all levels to improve their employees' IB (Hansen & Pihl-Thingvad, 2019). However, uncertainty challenges can limit employee

creativity, negatively impacting both employee and organisational outcomes (Arasli et al., 2020). Uncertainty is predicted to reduce because of this affirmation, and employees' confidence in exploring and implementing new opportunities and trying out new and unique ideas may improve. Uncertainty, indistinctness, and ambiguity are inherent in IB. There is no guarantee that the innovative transformations, novel ideas, and creative solutions will achieve their goals (Afsar & Masood, 2018; Zhou & George, 2001). Ambiguity about how new ideas will benefit the organisation may cause supervisors to not encourage or accept the desired change envisioned by the subordinate due to lengthy processes (from idea development to social support to idea implementation and commercialization).



Considering the risky nature of IB, employees may face ambiguity and uncertainty and may require assurance from their superiors that they are on the correct route. Uncertainty is further increased by the battle to connect a unique, exciting, and helpful

idea with existing processes, procedures, and routines. The natural tendency of people to reject change and not fully commit to a new concept may increase the level of uncertainty (Afsar & Masood, 2018). Figure 6 depicts the ATLAS.ti 22 network analysis of uncertainty challenges.

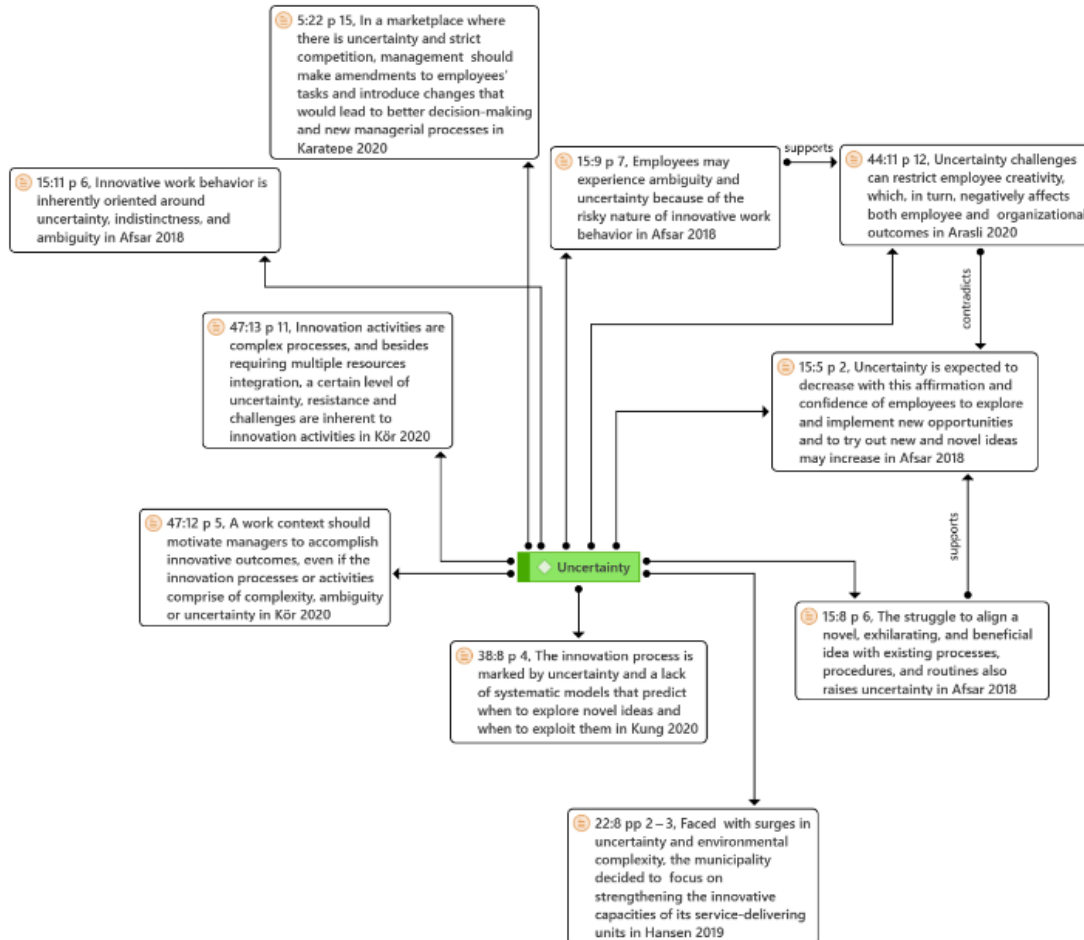


Figure 6: A network view on uncertainty challenges

Competitiveness Challenges

In volatile and competitive markets, firms desiring success, competitive advantage, and long-term viability must re-evaluate their goals in order to align their business models with technological advancements (Li et al., 2020; Santos et al., 2018; Yoon et al., 2019). In this environment, innovation has been recognised as a significant driving force for the organisation's existence, success, and competitiveness (Iqbal et al., 2020; Li et al., 2020). Organisations implement several techniques to develop creativity and IB for competitive advantage and survival adaptation to face today's aggressive and dynamic environment (Grošelj et al., 2020; Gumusluoglu et al., 2017). The empirical studies show that leadership is one of the most important

factors that affect creativity and innovation (Grošelj et al., 2020; Gumusluolu & Ilsev, 2009). As organisations rely on various players to drive IB, organisational leaders are the most visible players who may develop IB at work and hence bring about new changes in an elusive environment (Gardner et al., 2011; Laguna et al., 2019; Yammarino et al., 2008). Additionally, contemporary research has identified leadership as one of the most important factors influencing IB (Laguna et al., 2019; McKinley et al., 2014). As a result, corporations have recognised the need to engage leaders capable of addressing difficult problems and developing new solutions (Amabile & Pratt, 1988; Laguna et al., 2019). Individual employees' inventiveness is a crucial source of competitive advantage for businesses, contributing to social growth (Laguna et



al., 2019). Employee participation in innovation initiatives is a significant source of competitive advantage for organisations (Hughes et al., 2018; Iqbal, et al., 2020). Leadership plays a vital role in building IB among employees as a means of supporting organisational survival and as a crucial asset to assist businesses maintain their core

competitiveness, possibly even more so in the more turbulent and dynamic environment (Wang et al., 2020). In order to ensure long-term competitiveness, the firm must encourage employees' IB in order to create a proactive and sustainable creative organisation (Amankwaa et al., 2019). Figure 7 depicts the ATLAS.ti 22 network analysis of competitiveness challenges.

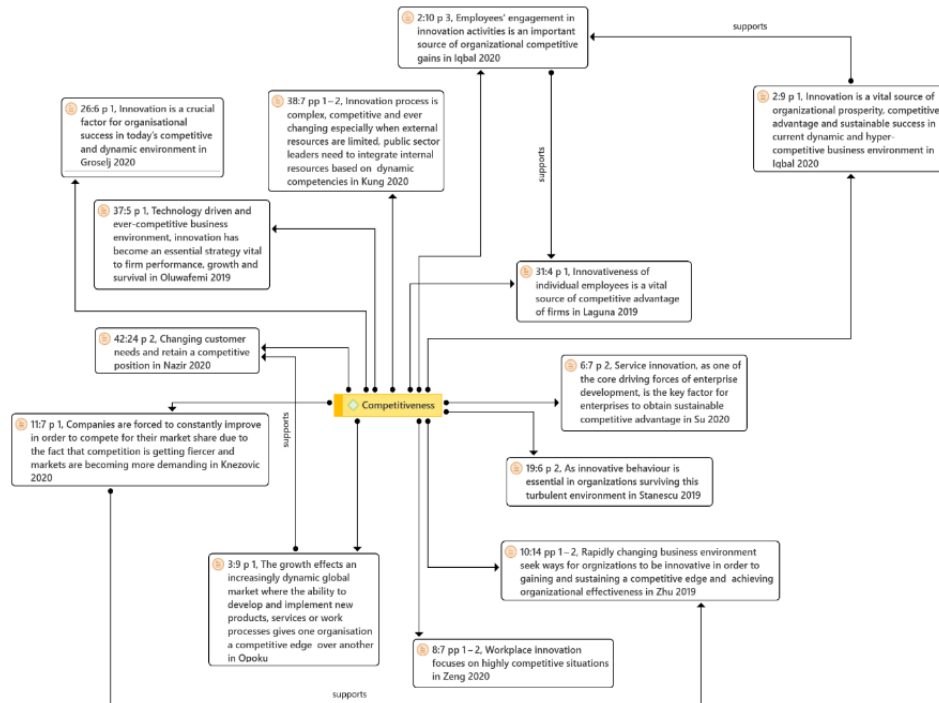


Figure 7: A network view on competitiveness challenges

Conclusion

There has been a review about PLS and IB in the private, public, and non-government sectors from research papers that have been internationally published. The findings from ATLAS.ti 22 showed that the review of PLS and IB revealed patterns, trends, and challenges as a result of its code-to-network analysis. This research has made an important contribution to the analysis of PLS and IB patterns by thoroughly identifying theme codes among 65 peer-reviewed articles published between 2016 and 2020. It has also contributed to the assessment of publication trends. Based on the findings of this study, there appears to be a gap in the research concerning the impact of PLS on IB. This review study provides opportunities for potential future studies about the impact of PLS on IB at different levels; namely at employee, leader, team, and organisational levels, particularly in the context of the COVID-19 issue. Developing a new PLS and IB model is required in order to support and

prepare the management in the private, public, and non-government sectors for future crisis situations and organisational competency-based crisis management that may become necessary.

References

Afsar, B., Badir, Y., & Saeed, B. (2014). Transformational Leadership and Innovative Work Behavior. *Industrial Management and Data Systems*, 114(8), 1270–1300. <https://doi.org/10.1108/IMDS-05-2014-0152>

Afsar, Bilal, & Masood, M. (2018). Transformational Leadership, Creative Self-Efficacy, Trust in Supervisor, Uncertainty Avoidance, and Innovative Work Behavior of Nurses. *Journal of Applied Behavioral Science*, 54(1), 36–61. <https://doi.org/10.1177/0021886317711891>

Afsar, Bilal, Masood, M., & Umrani, W. A. (2019). The role of Job Crafting and Knowledge Sharing on the effect of Transformational Leadership on Innovative Work Behavior. *Personnel Review*, 48(5), 1186–1208. <https://doi.org/10.1108/PR-04-2018-0133>

Agarwal, U. A. (2014). Linking Justice, Trust and Innovative Work Behaviour to Work Engagement. *Personnel Review*, 43(1), 41–73. <https://doi.org/10.1108/PR-02-2012-0019>

AlEssa, H. S., & Durugbo, C. M. (2021). Systematic Review of



- Innovative Work Behavior Concepts and Contributions. In *Management Review Quarterly*. Springer International Publishing. <https://doi.org/10.1007/s11301-021-00224-x>
- Ali, M., Zhang, L., Shah, S. J., Khan, S., & Shah, A. M. (2020). Impact of Humble Leadership on Project Success: The Mediating role of Psychological Empowerment and Innovative Work Behavior. *Leadership and Organization Development Journal*, 41(3), 349–367. <https://doi.org/10.1108/LODJ-05-2019-0230>
- Amabile, T. M., & Pratt, M. G. (1988). The Dynamic Componential Model of Creativity and Innovation in Organizations: Making Progress, Making Meaning. *Research in Organizational Behavior*, 36, 123–167. <https://doi.org/10.1016/j.riob.2016.10.001>
- Amankwaa, A., Gyensare, M. A., & Susomrith, P. (2019). Transformational Leadership with Innovative Behaviour: Examining Multiple Mediating Paths with PLS-SEM. *Leadership and Organization Development Journal*, 40(4), 402–420. <https://doi.org/10.1108/LODJ-10-2018-0358>
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary and Guiding Framework. *Journal of Management*, 40(5), 1297–1333. <https://doi.org/10.1177/0149206314527128>
- Arasli, H., Arici, H. E., & Kole, E. (2020). Constructive Leadership and Employee Innovative Behaviors: A Serial Mediation Model. *Sustainability (Switzerland)*, 12(7), 1–17. <https://doi.org/10.3390/su12072592>
- Atitumpong, A., & Badir, Y. F. (2018). Leader-member Exchange, Learning Orientation and Innovative Work Behavior. *Journal of Workplace Learning*, 30(1), 32–47. <https://doi.org/10.1108/JWL-01-2017-0005>
- Axtell, C., Holman, D., & Wall, T. (2006). Promoting Innovation: A Change Study. *Journal of Occupational and Organizational Psychology*, 79(3), 509–516. <https://doi.org/10.1348/096317905X68240>
- Bavik, A. (2019). A Systematic Review of the Servant Leadership Literature in Management and Hospitality. In *International Journal of Contemporary Hospitality Management* (Vol. 32, Issue 1, pp. 347–382). <https://doi.org/10.1108/IJCHM-10-2018-0788>
- Bavik, A., Bavik, Y. L., & Tang, P. M. (2017). Servant Leadership, Employee Job Crafting, and Citizenship Behaviors: A Cross-Level Investigation. *Cornell Hospitality Quarterly*, 58(4), 364–373. <https://doi.org/10.1177/1938965517719282>
- Blau, P. M. (1964). Exchange and Power in Social Life. In Bock, G. W. and Young-Gul, K (Vol. 15). J. Wiley.
- Braun, V., & Clarke, V. (2013). Teaching Thematic Analysis: Overcoming Challenges and Developing Strategies for Effective Learning. *The Psychologist*, 26(2013), 120–123.
- Cai, W., Lysova, E. I., Khapova, S. N., & Bossink, B. A. G. (2018). Servant leadership and innovative work behavior in Chinese high-tech firms: A moderated mediation model of meaningful work and job autonomy. *Frontiers in Psychology*, 9(OCT), 1–13. <https://doi.org/10.3389/fpsyg.2018.01767>
- Canavesi, A., & Minelli, E. (2021). Servant Leadership: a Systematic Literature Review and Network Analysis. *Employee Responsibilities and Rights Journal*, 1–23. <https://doi.org/10.1007/s10672-021-09381-3>
- Cao, F., & Zhang, H. (2020). Workplace Friendship, Psychological Safety and Innovative Behavior in China: A Moderated-mediation Model. *Chinese Management Studies*, 14(3), 661–676. <https://doi.org/10.1108/CMS-09-2019-0334>
- Chen, C., Song, I. Y., Yuan, X., & Zhang, J. (2008). The Thematic and Citation Landscape of Data and Knowledge Engineering (1985-2007). *Data and Knowledge Engineering*, 67(2), 234–259. <https://doi.org/10.1016/j.datak.2008.05.004>
- Choi, S. B., Tran, T. B. H., & Kang, S. W. (2017). Inclusive Leadership and Employee Well-Being: The Mediating Role of Person-Job Fit. *Journal of Happiness Studies*, 18(6), 1877–1901. <https://doi.org/10.1007/s10902-016-9801-6>
- Chongvisal, R. (2020). Factors Affecting Innovative Work Behavior of Managers. *Polish Journal of Management Studies*, 22(2), 50–64. <https://doi.org/10.17512/pjms.2020.22.2.04>
- de Jong, J., & Den Hartog, D. (2010). Measuring Innovative Work Behaviour. *Creativity and Innovation Management*, 19(1), 23–36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-Determination Theory in Work Organizations: The State of a Science. In *Annual Review of Organizational Psychology and Organizational Behavior* (Vol. 4, pp. 19–43). <https://doi.org/10.1146/annurev-orgpsych-032516-113108>
- Dedahanov, A. T., Bozorov, F., & Sung, S. (2019). Paternalistic Leadership and Innovative Behavior: Psychological Empowerment as a Mediator. *Sustainability (Switzerland)*, 11(6), 1–14. <https://doi.org/10.3390/su11061770>
- Ding, H., & Yu, E. (2020). Subordinate-oriented Strengths-Based Leadership and Subordinate Job Performance: The Mediating effect of Supervisor-subordinate Guanxi. *Leadership and Organization Development Journal*, 41(8), 1107–1118. <https://doi.org/10.1108/LODJ-09-2019-0414>
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant Leadership: A Systematic Review and Call for Future Research. *Leadership Quarterly*, 30(1), 111–132. <https://doi.org/10.1016/j.leaqua.2018.07.004>
- Fang, Y. C., Chen, J. Y., Wang, M. J., & Chen, C. Y. (2019). The Impact of Inclusive Leadership on Employees' Innovative Behaviors: The Mediation of Psychological Capital. *Frontiers in Psychology*, 10(AUG), 1–11. <https://doi.org/10.3389/fpsyg.2019.01803>
- Gardner, W. L., Cogliser, C. C., Davis, K. M., & Dickens, M. P. (2011). Authentic Leadership: A review of the Literature and Research Agenda. In *Leadership Quarterly* (Vol. 22, Issue 6, pp. 1120–1145). <https://doi.org/10.1016/j.leaqua.2011.09.007>
- Grošelj, M., Černe, M., Penger, S., & Grah, B. (2020). Authentic and Transformational Leadership and Innovative Work Behaviour: The Moderating Role of Psychological Empowerment. *European Journal of Innovation Management*, 1–30. <https://doi.org/10.1108/EJIM-10-2019-0294>
- Gu, H., Duverger, P., & Yu, L. (2017). Can Innovative Behavior be Led by Management? A Study from the Lodging Business. *Tourism Management*, 63, 144–157. <https://doi.org/10.1016/j.tourman.2017.06.010>
- Gumusluoglu, L., Karakitapoğlu-Aygün, Z., & Scandura, T. A. (2017). A Multilevel Examination of Benevolent Leadership and Innovative Behavior in R&D Contexts: A Social Identity Approach. *Journal of Leadership and Organizational Studies*, 24(4), 479–493.



- <https://doi.org/10.1177/1548051817705810>
- Gumusluolu, L., & Ilsev, A. (2009). Transformational Leadership and Organizational Innovation: The roles of Internal and External Support for Innovation. *Journal of Product Innovation Management*, 26(3), 264–277. <https://doi.org/10.1111/j.1540-5885.2009.00657.x>
- Hansen, J. A., & Pihl-Thingvad, S. (2019). Managing Employee Innovative Behaviour through Transformational and Transactional Leadership Styles. *Public Management Review*, 21(6), 918–944. <https://doi.org/10.1080/14719037.2018.1544272>
- Hon, A. H. Y. (2012). When Competency-based Pay relates to Creative Performance: The Moderating role of Employee Psychological Need. *International Journal of Hospitality Management*, 31(1), 130–138. <https://doi.org/10.1016/j.ijhm.2011.04.004>
- Hon, A. H. Y., & Lui, S. S. (2016). Employee Creativity and Innovation in Organizations: Review, Integration, and Future Directions for Hospitality Research. *International Journal of Contemporary Hospitality Management*, 28(5), 862–885. <https://doi.org/10.1108/IJCHM-09-2014-0454>
- Hosshan, H., Stancliffe, R. J., Villeneuve, M., & Bonati, M. L. (2020). Inclusive Schooling in Southeast Asian Countries: A Scoping Review of the Literature. In *Asia Pacific Education Review* (Vol. 21, Issue 1, pp. 99–119). <https://doi.org/10.1007/s12564-019-09613-0>
- Huang, K. G. L., Geng, X., & Wang, H. (2017). Institutional Regime Shift in Intellectual Property Rights and Innovation Strategies of Firms in China. *Organization Science*, 28(2), 355–377. <https://doi.org/10.1287/orsc.2017.1117>
- Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, Creativity and Innovation: A Critical Review and Practical Recommendations. *Leadership Quarterly*, 29(5), 549–569. <https://doi.org/10.1016/j.leaqua.2018.03.001>
- Hunsaker, W. D. (2020). Spiritual Leadership and Employee Innovation. *Current Psychology*, 1–10. <https://doi.org/10.1007/s12144-020-01011-9>
- Iqbal, A., Latif, K. F., & Ahmad, M. S. (2020). Servant Leadership and Employee Innovative Behaviour: Exploring Psychological Pathways. *Leadership and Organization Development Journal*, 41(6), 813–827. <https://doi.org/10.1108/LODJ-11-2019-0474>
- Iqbal, A., Nazir, T., & Ahmad, M. S. (2020). Entrepreneurial Leadership and Employee Innovative Behavior: An Examination through Multiple Theoretical Lenses. *European Journal of Innovation Management*, November 2020, 1–19. <https://doi.org/10.1108/EJIM-06-2020-0212>
- Janssen, O. (2000). Job Demands, Perceptions of Effort-Reward Fairness and Innovative Work Behaviour. *Journal of Occupational and Organizational Psychology*, 73, 287–302. <https://doi.org/10.1348/096317900167038>
- Janssen, O., & Van Yperen, N. W. (2004). Employees' Goal Orientations, the Quality of Leader-Member Exchange, and the Outcomes of Job Performance and Job Satisfaction. *Academy of Management Journal*, 47(3), 368–384. <https://doi.org/10.2307/20159587>
- Javed, B., Bashir, S., Rawwas, M. Y. A., & Arjoon, S. (2016). Islamic Work Ethic, Innovative Work Behaviour, and Adaptive Performance: The Mediating Mechanism and an Interacting Effect. *Current Issues in Tourism*, 20(6), 647–663. <https://doi.org/10.1080/13683500.2016.1171830>
- Javed, B., Fatima, T., Khan, A. K., & Bashir, S. (2020). Impact of Inclusive Leadership on Innovative Work Behavior: The Role of Creative Self-Efficacy. *Journal of Creative Behavior*, 1–14. <https://doi.org/10.1002/jocb.487>
- Javed, B., Khan, A. K., Arjoon, S., Mashkooor, M., & Haque, A. ul. (2018). Openness to Experience, Ethical Leadership, and Innovative Work Behavior. *Journal of Creative Behavior*, 54(1), 211–223. <https://doi.org/10.1002/jocb.360>
- Javed, B., Rawwas, M. Y. A., Khandai, S., Shahid, K., & Tayyeb, H. H. (2018). Ethical Leadership, Trust in Leader and Creativity: The Mediated Mechanism and an Interacting Effect. *Journal of Management and Organization*, 24(3), 388–405. <https://doi.org/10.1017/jmo.2017.56>
- Jin, Y., Ji, S., Li, X., & Yu, J. (2017). A Scientometric Review of Hotspots and Emerging Trends in Additive Manufacturing. In *Journal of Manufacturing Technology Management* (Vol. 28, Issue 1, pp. 18–38). <https://doi.org/10.1108/JMTM-12-2015-0114>
- Jong, J. P. J. de, & Hartog, D. N. Den. (2007). How Leaders Influence Employees' Innovative Behaviour. *European Journal of Innovation Management*, 10(1), 41–64. <https://doi.org/10.1108/14601060710720546>
- Kahai, S. S., Sosik, J. J., & Avolio, B. J. (2003). Effects of Leadership Style, Anonymity, and Rewards on Creativity-relevant Processes and Outcomes in an Electronic Meeting System Context. *Leadership Quarterly*, 14(4–5), 499–524. [https://doi.org/10.1016/S1048-9843\(03\)00049-3](https://doi.org/10.1016/S1048-9843(03)00049-3)
- Karatepe, O. M., Aboramadan, M., & Dahleez, K. A. (2020). Does Climate for Creativity Mediate the Impact of Servant Leadership on Management Innovation and Innovative Behavior in the Hotel Industry? *International Journal of Contemporary Hospitality Management*, 32(8), 2497–2517. <https://doi.org/10.1108/IJCHM-03-2020-0219>
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The Interplay of Leadership Styles, Innovative Work Behavior, Organizational Culture and Organizational Citizenship Behavior. *SAGE Open*, 10(1), 1–16. <https://doi.org/10.1177/2158244019898264>
- Khan, M. M., Mubarik, M. S., & Islam, T. (2020). Leading the Innovation: Role of Trust and Job Crafting as Sequential Mediators relating Servant Leadership and Innovative Work Behavior. *European Journal of Innovation Management*, 24(5), 1547–1568. <https://doi.org/10.1108/EJIM-05-2020-0187>
- Kim, B. J., Kim, T. H., & Jung, S. Y. (2018). How to Enhance Sustainability through Transformational Leadership: The Important role of Employees' Forgiveness. *Sustainability* (Switzerland), 10(8), 9–11. <https://doi.org/10.3390/su10082682>
- Kim, M. S., & Koo, D. W. (2017). Linking LMX, Engagement, Innovative Behavior, and Job Performance in Hotel Employees. *International Journal of Contemporary Hospitality Management*, 29(12), 3044–3062. <https://doi.org/10.1108/IJCHM-06-2016-0319>
- Knezović, E., & Drkić, A. (2020). Innovative Work Behavior in SMEs: The Role of Transformational Leadership. *Employee Relations*, 1–18. <https://doi.org/10.1108/ER-03-2020-0124>
- Kong, H., Chiu, W. C. K., & Leung, H. K. W. (2019). Building Creative Self-efficacy via Learning Goal Orientation, Creativity Job Requirement, and Team Learning Behavior: The Key to Employee Creativity. *Australian Journal of Management*, 44(3), 443–461. <https://doi.org/10.1177/0312896218792957>
- Kör, B., Wakkee, I., & van der Sijde, P. (2020). How to Promote Managers' Innovative Behavior at Work: Individual Factors and Perceptions. *Technovation*, 99(November



- 2018), 1–15. <https://doi.org/10.1016/j.technovation.2020.102127>
- Kung, C. W., Uen, J. F., & Lin, S. C. (2020). Ambidextrous Leadership and Employee Innovation in Public Museums. *Chinese Management Studies*, 14(4), 995–1014. <https://doi.org/10.1108/CMS-05-2018-0523>
- Laguna, M., Walachowska, K., Gorgievski-Duijvesteijn, M. J., & Moriano, J. A. (2019). Authentic Leadership and Employees' Innovative Behaviour: A Multilevel Investigation in Three Countries. *International Journal of Environmental Research and Public Health*, 16(21), 1–17. <https://doi.org/10.3390/ijerph16214201>
- Lappalainen, P. (2015). Predictors of Effective Leadership in Industry – Should Engineering Education focus on Traditional Intelligence, Personality, or Emotional Intelligence? *European Journal of Engineering Education*, 40(2), 222–233. <https://doi.org/10.1080/03043797.2014.944102>
- Li, C., Makhdoom, H. U. R., & Asim, S. (2020). Impact of Entrepreneurial Leadership on Innovative Work Behavior: Examining Mediation and Moderation Mechanisms. *Psychology Research and Behavior Management*, 13, 105–118. <https://doi.org/10.2147/PRBM.S236876>
- Li, H., Sajjad, N., Wang, Q., Ali, A. M., Khaqan, Z., & Amina, S. (2019). Influence of Transformational Leadership on Employees' Innovative Work Behavior in Sustainable Organizations: Test of Mediation and Moderation Processes. *Sustainability (Switzerland)*, 11(6), 1–21. <https://doi.org/10.3390/su11061594>
- Li, M., & Hsu, C. H. C. (2016). A Review of Employee Innovative Behavior in Services. In *International Journal of Contemporary Hospitality Management* (Vol. 28, Issue 12, pp. 2820–2841). <https://doi.org/10.1108/IJCHM-04-2015-0214>
- Ling, Q., Lin, M., & Wu, X. (2016). The Trickle-down effect of Servant Leadership on Frontline Employee Service Behaviors and Performance: A Multilevel Study of Chinese Hotels. *Tourism Management*, 52, 341–368. <https://doi.org/10.1016/j.tourman.2015.07.008>
- Liu, Y., Wang, W., & Chen, D. (2019). Linking Ambidextrous Organizational Culture to Innovative Behavior: A Moderated Mediation Model of Psychological Empowerment and Transformational Leadership. *Frontiers in Psychology*, 10(October), 1–12. <https://doi.org/10.3389/fpsyg.2019.02192>
- Masood, M., & Afsar, B. (2017). Transformational Leadership and Innovative Work Behavior among Nursing Staff. *Nursing Inquiry*, 24(4), 1–14. <https://doi.org/10.1111/nin.12188>
- McKinley, W., Latham, S., & Braun, M. (2014). Organizational Decline and Innovation: Turnarounds and Downward Spirals. *Academy of Management Review*, 39(1), 88–110. <https://doi.org/10.5465/amr.2011.0356>
- Miao, Q., Newman, A., Schwarz, G., & Cooper, B. (2017). How Leadership and Public Service Motivation Enhance Innovative Behavior. *Public Administration Review*, 1–11. <https://doi.org/10.1111/puar.12839>
- Michaelis, B., Stegmaier, R., & Sonntag, K. (2009). Affective Commitment to Change and Innovation Implementation Behavior: The Role of Charismatic Leadership and Employees' Trust in Top Management. *Journal of Change Management*, 9(4), 1–15. <https://doi.org/10.1080/14697010903360608>
- Mittal, S., & Dhar, R. L. (2015). Transformational Leadership and Employee Creativity: Mediating role of Creative Self-efficacy and Moderating role of Knowledge Sharing. *Management Decision*, 53(5), 894–910. <https://doi.org/10.1108/MD-07-2014-0464>
- Mokhber, M., Khairuzzaman, W., & Vakilbashi, A. (2018). Leadership and Innovation: The Moderator role of Organization Support for Innovative Behaviors. *Journal of Management and Organization*, 24(1), 108–128. <https://doi.org/10.1017/jmo.2017.26>
- Mytelka, L. K., & Smith, K. (2002). Policy Learning and Innovation Theory: An Interactive and Co-evolving Process. *Research Policy*, 31(8–9), 1467–1479. [https://doi.org/10.1016/S0048-7333\(02\)00076-8](https://doi.org/10.1016/S0048-7333(02)00076-8)
- Nazir, S., Shafi, A., Asadullah, M. A., Qun, W., & Khadim, S. (2020a). How does Ethical Leadership Boost Follower's Creativity? Examining Mediation and Moderation Mechanisms. *European Journal of Innovation Management*, 18, 1–30. <https://doi.org/10.1108/EJIM-03-2020-0107>
- Nazir, S., Shafi, A., Asadullah, M. A., Qun, W., & Khadim, S. (2020b). Linking Paternalistic Leadership to Follower's Innovative Work Behavior: The Influence of Leader-Member Exchange and Employee Voice. *European Journal of Innovation Management*, 1–25. <https://doi.org/10.1108/EJIM-01-2020-0005>
- Newman, A., Neesham, C., Manville, G., & Tse, H. H. M. (2017). Examining The Influence of Servant and Entrepreneurial Leadership on The Work Outcomes of Employees in Social Enterprises. *International Journal of Human Resource Management*, 29(20), 1–23. <https://doi.org/10.1080/09585192.2017.1359792>
- Newman, A., Tse, H. H. M., Schwarz, G., & Nielsen, I. (2018). The effects of Employees' Creative Self-efficacy on Innovative Behavior: The role of Entrepreneurial Leadership. *Journal of Business Research*, 89(April), 1–9. <https://doi.org/10.1016/j.jbusres.2018.04.001>
- Oladinrin, T. O., Mesthrige Jayantha, W., & Moses, T. (2021). New Working Practices: A Scientometric Review. *International Journal of Real Estate Studies*, 15(1), 49–62. <https://doi.org/10.11113/intrest.v15n1.8>
- Oluwafemi, T. B., Mitchelmore, S., & Nikolopoulos, K. (2020). Leading Innovation: Empirical Evidence for Ambidextrous Leadership from UK High-tech SMEs. *Journal of Business Research*, 119(November 2018), 195–208. <https://doi.org/10.1016/j.jbusres.2019.10.035>
- Opoku, M. A., Choi, S. B., & Kang, S. W. (2019). Servant Leadership and Innovative Behaviour: An Empirical Analysis of Ghana's Manufacturing Sector. *Sustainability (Switzerland)*, 11(22), 1–18. <https://doi.org/10.3390/su11226273>
- Patiar, A., & Wang, Y. (2016). The Effects of Transformational Leadership and Organizational Commitment on Hotel Departmental Performance. *International Journal of Contemporary Hospitality Management*, 28(3), 586–608. <https://doi.org/10.1108/IJCHM-01-2014-0050>
- Pieterse, A. N., van Knippenberg, D., Schippers, M., & Stam, D. (2010). Transformational and Transactional Leadership and Innovative Behavior: The Moderating Role of Psychological Empowerment. *Journal of Organizational Behavior*, 31(4), 609–623. <https://doi.org/10.1002/job.650>
- Pundt, A., Martins, E., & Nerdinger, F. W. (2010). Innovative Behavior and the Reciprocal Exchange between Employees and Organizations. *German Journal of Human Resource Management: Zeitschrift Für*



- Personalforschung, 24(2), 173–193. <https://doi.org/10.1177/239700221002400205>
- Ramamoorthy, N., Flood, P. C., Slatery, T., & Sardessai, R. (2005). Determinants of Innovative Work Behaviour: Development and Test of an Integrated Model. *Creativity and Innovation Management*, 14(2), 142–150. <https://doi.org/10.1111/j.1467-8691.2005.00334.x>
- Romli, M. H., Tan, M. P., Mackenzie, L., Lovarini, M., Suttan, P., & Clemson, L. (2017). Falls amongst Older People in Southeast Asia: A Scoping Review. In *Public Health* (Vol. 145, pp. 96–112). <https://doi.org/10.1016/j.puhe.2016.12.035>
- Saeed, B. Bin, Afsar, B., Shahjehan, A., & Imad Shah, S. (2019). Does Transformational Leadership Foster Innovative Work Behavior? The roles of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement. *Economic Research-Ekonomika Istrazivanja*, 32(1), 254–281. <https://doi.org/10.1080/1331677X.2018.1556108>
- Salas-Vallina, A., Ferrer-Franco, A., & Fernández Guerrero, R. (2018). Altruistic Leadership and Affiliative Humor's Role on Service Innovation: Lessons from Spanish Public Hospitals. *International Journal of Health Planning and Management*, 33(3), e861–e872. <https://doi.org/10.1002/hpm.2549>
- Santos, G., Afonseca, J., Lopes, N., Félix, M. J., & Murmura, F. (2018). Critical Success Factors in the Management of Ideas as an Essential Component of Innovation and Business Excellence. *International Journal of Quality and Service Sciences*, 10(3), 214–232. <https://doi.org/10.1108/IJQSS-05-2017-0051>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. *Academy of Management Journal*, 37(3), 580–607. <https://doi.org/10.2307/256701>
- Shipton, H., West, M. A., Dawson, J., Birdi, K., & Patterson, M. (2006). HRM as a Predictor of Innovation. *Human Resource Management Journal*, 16(1), 3–27. <https://doi.org/10.1111/j.1748-8583.2006.00002.x>
- Slater, S. F., Mohr, J. J., & Sengupta, S. (2014). Radical Product Innovation Capability: Literature Review, Synthesis, and Illustrative Research Propositions. *Journal of Product Innovation Management*, 31(3), 552–566. <https://doi.org/10.1111/jpim.12113>
- Slåtten, T., Lien, G., Horn, C. M. F., & Pedersen, E. (2019). The Links between Psychological Capital, Social Capital, and Work-related Performance—A Study of Service Sales Representatives. *Total Quality Management and Business Excellence*, 30(sup1), 195–209. <https://doi.org/10.1080/14783363.2019.1665845>
- Slåtten, T., Mutonyi, B. R., & Lien, G. (2020). The Impact of Individual Creativity, Psychological Capital, and Leadership Autonomy Support on Hospital Employees' Innovative Behaviour. *BMC Health Services Research*, 20(1), 1–17. <https://doi.org/10.1186/s12913-020-05954-4>
- Stanescu, D. F., Zbucea, A., & Pinzaru, F. (2020). Transformational Leadership and Innovative Work Behaviour: The Mediating Role of Psychological Empowerment. *Kybernetes*, 1–17. <https://doi.org/10.1108/K-07-2019-0491>
- Su, W., Lyu, B., Chen, H., & Zhang, Y. (2020). How does Servant Leadership Influence Employees' Service Innovative Behavior? The roles of Intrinsic Motivation and Identification with the Leader. *Baltic Journal of Management*, 15(4), 571–586. <https://doi.org/10.1108/BJM-09-2019-0335>
- Su, Z. X., Wang, Z., & Chen, S. (2020). The impact of CEO Transformational Leadership on Organizational Voluntary Turnover and Employee Innovative Behaviour: The Mediating role of Collaborative HRM. *Asia Pacific Journal of Human Resources*, 58(2), 197–219. <https://doi.org/10.1111/1744-7941.12217>
- Thurlings, M., Evers, A. T., & Vermeulen, M. (2015). Toward a Model of Explaining Teachers' Innovative Behavior: A Literature Review. *Review of Educational Research*, 85(3), 430–471. <https://doi.org/10.3102/0034654314557949>
- Vandavasi, R. K. K., McConville, D. C., Uen, J. F., & Yepuru, P. (2019). Knowledge Sharing, Shared Leadership and Innovative Behaviour: A Cross-Level Analysis. *International Journal of Manpower*, 41(8), 1221–1233. <https://doi.org/10.1108/IJM-04-2019-0180>
- Vermeulen, M., Kreijns, K., & Evers, A. T. (2020). Transformational Leadership, Leader–Member Exchange and School Learning Climate: Impact on Teachers' Innovative Behaviour in the Netherlands. *Educational Management Administration and Leadership*, 1–20. <https://doi.org/10.1177/1741143220932582>
- Wang, S., Eva, N., Newman, A., & Zhou, H. (2020). A Double-edged Sword: The effects of Ambidextrous Leadership on Follower Innovative Behaviors. *Asia Pacific Journal of Management*, 1–22. <https://doi.org/10.1007/s10490-020-09714-0>
- Wang, Y. X., Yang, Y. J., Wang, Y., Su, D., Li, S. W., Zhang, T., & Li, H. P. (2019). The Mediating Role of Inclusive Leadership: Work Engagement and Innovative Behaviour among Chinese Head Nurses. *Journal of Nursing Management*, 27(4), 688–696. <https://doi.org/10.1111/jonm.12754>
- Wang, Z., Meng, L., & Cai, S. (2019). Servant Leadership and Innovative Behavior: A Moderated Mediation. *Journal of Managerial Psychology*, 34(8), 505–518. <https://doi.org/10.1108/JMP-11-2018-0499>
- Wang, Z., Ren, S., Chadee, D., Liu, M., & Cai, S. (2020). Team Reflexivity and Employee Innovative Behavior: The Mediating Role of Knowledge Sharing and Moderating Role of Leadership. *Journal of Knowledge Management*, 1–21. <https://doi.org/10.1108/JKM-09-2020-0683>
- Wikström, P. A. (2010). Sustainability and Organizational Activities - Three Approaches. *Sustainable Development*, 18(2), 99–107. <https://doi.org/10.1002/sd.449>
- Woods, S. A., Mustafa, M. J., Anderson, N., & Sayer, B. (2018). Innovative Work Behavior and Personality Traits: Examining the Moderating Effects of Organizational Tenure. *Journal of Managerial Psychology*, 33(1), 1–16. <https://doi.org/10.1108/JMP-01-2017-0016>
- Xiao, H., Zhang, Z., & Zhang, L. (2020). Is Temporal Leadership always Beneficial? The role of Job Passion and Synchrony Preference. *Personnel Review*, 1–18. <https://doi.org/10.1108/PR-02-2020-0078>
- Xu, B. Da, Zhao, S. K., Li, C. R., & Lin, C. J. (2017). Authentic Leadership and Employee Creativity: Testing the Multilevel Mediation Model. *Leadership and Organization Development Journal*, 38(3), 482–498. <https://doi.org/10.1108/LODJ-09-2015-0194>
- Yammarino, F. J., Dionne, S. D., Schriesheim, C. A., & Dansereau, F. (2008). Authentic Leadership and Positive Organizational Behavior: A Meso, Multi-level Perspective. *Leadership Quarterly*, 19(6), 693–707. <https://doi.org/10.1016/j.leaqua.2008.09.004>
- Yang, J., Chang, M., Chen, Z., Zhou, L., & Zhang, J. (2020). The



- Chain Mediation Effect of Spiritual Leadership on Employees' Innovative Behavior. *Leadership and Organization Development Journal*, 42(1), 114–129. <https://doi.org/10.1108/LODJ-10-2019-0442>
- Yang, K., Zhou, L., Wang, Z., Lin, C., & Luo, Z. (2019). Humble Leadership and Innovative Behaviour Among Chinese Nurses: The Mediating role of Work Engagement. *Journal of Nursing Management*, 27(8), 1801–1808. <https://doi.org/10.1111/jonm.12879>
- Yi, L., Uddin, M. A., Das, A. K., Mahmood, M., & Sohel, S. M. (2019). Do Transformational Leaders engage Employees in Sustainable Innovative Work Behaviour? Perspective from a Developing Country. *Sustainability (Switzerland)*, 11(9), 1–18. <https://doi.org/10.3390/su11092485>
- Yoon, S. H., Thin, N. S., Thao, V. T. T., Im, E. T., & Gim, G. Y. (2019). A Study on Success Factors for Business Model Innovation in the 4th Industrial Revolution. *Studies in Computational Intelligence*, 789, 105–127. https://doi.org/10.1007/978-3-319-98881-8_8
- Younas, A., Wang, D., Javed, B., Rawwas, M. Y. A., Abdullah, I., & Zaffar, M. A. (2018). Positive Psychological States and Employee Creativity: The role of Ethical Leadership. *Journal of Creative Behavior*, 54(3), 567–581. <https://doi.org/10.1002/jocb.391>
- Zairul, M. (2022). Opening the Pandora's Box of Issues in the Industrialised Building System (ibs) in Malaysia: A Thematic Review. *Journal of Applied Science and Engineering (Taiwan)*, 25(2), 297–310. [https://doi.org/10.6180/jase.202204_25\(2\).0006](https://doi.org/10.6180/jase.202204_25(2).0006)
- Zeng, J., & Xu, G. (2020). How Servant Leadership Motivates Innovative Behavior: A Moderated Mediation Model. *International Journal of Environmental Research and Public Health*, 17(13), 4753. <https://doi.org/10.3390/ijerph17134753>
- Zhang, Yanchun, Zheng, J., & Darko, A. (2018). How does Transformational Leadership Promote Innovation in Construction? The Mediating role of Innovation Climate and the Multilevel Moderation role of Project Requirements. *Sustainability (Switzerland)*, 10(5), 1–19. <https://doi.org/10.3390/su10051506>
- Zhang, Ying, & Yang, F. (2020). How and When Spiritual Leadership Enhances Employee Innovative Behavior. *Personnel Review*, 50(2), 596–609. <https://doi.org/10.1108/PR-07-2019-0346>
- Zhou, J., & George, J. M. (2001). When Job Dissatisfaction Leads to Creativity: Encouraging the Expression of Voice. *Academy of Management Journal*, 44(4), 682–696. <https://doi.org/10.2307/3069410>
- Zhu, C., & Zhang, F. (2020). How does Servant Leadership Fuel Employee Innovative Behavior? A Moderated Mediation Framework. *Asia Pacific Journal of Human Resources*, 58(3), 356–377. <https://doi.org/10.1111/1744-7941.12227>
- Zhu, J., Yao, J., & Zhang, L. (2019). Linking Empowering Leadership to Innovative Behavior in Professional Learning Communities: The role of Psychological Empowerment and Team Psychological Safety. *Asia Pacific Education Review*, 20(4), 657–671. <https://doi.org/10.1007/s12564-019-09584-2>

