

MDPI

Article

# Bolstering the Moderating Effect of Supervisory Innovative Support on Organisational Learning and Employees' Engagement

Opeyemi Olunike Joel \*D, Chinoyen Love Moses, Ebeguki Edith Igbinoba, Maxwell Ayodele Olokundun, Odunayo Paul Salau, Oluwatunmise Ojebola and Olufunke P. Adebayo

Department of Business Management, Covenant University, Ota 112104, Nigeria

\* Correspondence: opeyemi.joel@covenantuniversity.edu.ng

**Abstract:** Organisational learning, as the process of continuous information acquisition, dissemination and exploitation, often leads to an organisation's competitiveness. Hence, this study examined the relationship between organisational learning and employee engagement. The study also investigated the extent to which supervisory innovative support moderates organisational learning and the effectiveness of employee engagement. Five hundred forty-one (541) participants were surveyed using stratified and purposive sampling methods to make up the sample size. To be more precise, Smart Partial Least Square (PLS 3.0) was used to analyse the relationship between the study's variables. The hypothesis test found that supervisory innovative support moderated the relationship between organisational learning and employee engagement to a significant extent ( $R^2 = 0.810$  Adjusted  $R^2 = 0.806$  p-value 0.05). As a result, the study recommends that pharmaceutical companies clarify their policies and culture to employees so that supervisory support can lead to higher employee engagement through organisational learning. Pharmaceutical firms should also provide financial incentives based on employee duration or distinctive contributions to company goals.

Keywords: employee engagement; innovation; supervisory innovative support; job commitment



Citation: Joel, Opeyemi Olunike,
Chinoyen Love Moses, Ebeguki Edith
Igbinoba, Maxwell Ayodele
Olokundun, Odunayo Paul Salau,
Oluwatunmise Ojebola, and
Olufunke P. Adebayo. 2023.
Bolstering the Moderating Effect of
Supervisory Innovative Support on
Organisational Learning and
Employees' Engagement.
Administrative Sciences 13: 81.
https://doi.org/10.3390/
admsci13030081

Received: 18 January 2023 Revised: 23 February 2023 Accepted: 27 February 2023 Published: 9 March 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

### 1. Introduction

Organisations worldwide are increasingly faced with a complex and dynamic environment undergoing constant and swift change. Today's business environment is faced with intense turbulence, complexity, greater competition, and uncertainty, driving businesses to focus more on consumers' needs and satisfaction (Edmonstone 2018). As a result, organisations are constantly looking for improved tools, cutting-edge innovations, and methods to assist them in achieving their goals. Innovative actions may be disruptive (for example, by opening up new markets to compete with established ones) or incremental (i.e., enhancing or changing the organisation's products, services, procedures, or processes). These are frequently used to enhance currently offered products, competitive differences, and product development effectiveness, all of which are essentially products of organisational learning.

Organisational learning is the firm's ability to acquire, utilise, and exchange information to achieve a competitive advantage (Amah 2018). It frequently results in product, process, and technology innovation. Organisational learning in the context of this study includes descriptive, prescriptive, diagnostic and normative learning (Chiva et al. 2014). Descriptive learning suggests information acquisition, dissemination, interpretation, and organisational memory. Normative learning explains acquiring information on the individual (personal mastery, mental modelling), group (shared visioning, team-learning), and organisational (systems thinking) levels. Prescriptive learning helps organisations transform information from individual experience, reflection, and conceptualisation into organisational experimentation. Diagnostic learning emphasises differentiation, flexibility and adaptability. Organisations possessing a high level of newly acquired information

Adm. Sci. 2023, 13, 81 2 of 12

are better able to respond swiftly to environmental changes brought on by technological advancement. Studies have shown that these newly acquired information and skills stimulate employees' dedication and engagement to job functions and roles (Edmonstone 2018; Aragon et al. 2020; Chiva et al. 2014). According to Chiva et al. (2014), engaged employees are responsive to the changing business environment and work as a team to increase job productivity. Engaged employees also become involved in specific goals and receive constructive and timely feedback to help them build new skills (Hussain et al. 2016). However, Amah (2018) opines that supervisory innovative support strongly influences employees' engagement. According to Akande-Sholabi et al. (2020), supervisory innovative support may foster the relationship between organisational learning and employee engagement. This is consequent upon the fact that supervisory innovative support in the workplace promotes employees' confidence in developing their knowledge and skill sets and motivates the generation of novel ideas for speedy improvements, particularly in the Nigerian pharmaceutical industry.

According to the literature, the pharmaceutical industry's purpose is to encourage the discovery, development, and manufacture of pharmaceutical products and medications (Akande-Sholabi et al. 2020; Cavallo et al. 2021). Many studies have found that innovative leaders in the pharmaceutical industry aid in discovering and producing new pharmaceuticals that improve the quality of life of patients all around the world (Cavallo et al. 2021). However, certain leaders and supervisors in the Nigerian pharmaceutical industry are slow to provide procedural documentation regarding drug usage (Cavallo et al. 2021). Furthermore, there are concerns about supervisors who need more skill and knowledge to provide support while providing ambiguous counsel and recommendations to employees (Oguegbe et al. 2017). Additionally, Tamunomiebi (2020) only presented data on the connections between the learning culture and organisational citizenship behaviour of selected Nigerian manufacturing enterprises. Most of these studies focused on how self-efficacy and workload affect employees' civic activity. However, adequate research has not been carried out to determine how well supervisory innovative support fosters the connection between organisational learning and employee engagement in the Nigerian pharmaceutical industry. Hence, this study aims to ascertain how supervisory innovative support moderates the relationship between organisational learning and employee engagement in the Nigerian pharmaceutical industry.

Additionally, most studies used correlation and regression analysis to analyse the data obtained. However, this work quantified variables, latent constructs were investigated, and structural linkages were examined. The factor model of the research demonstrated the construct validity, fitness, and reliability levels. This was performed using convergent and discriminant analysis. This study examined the following objectives to close the substantial gaps in the literature: (a) the extent to which descriptive learning influences employee engagement; (b) the extent to which normative learning influences employee engagement; (c) the influence of prescriptive learning on employee engagement; (d) the influence of diagnostic learning on employee engagement; and (e) the moderating influence of supervisory innovative supports on organisational learning and employee engagement. As a result, this study investigates the extent to which supervisory innovative support influences organisational learning and employee engagement in the Nigerian pharmaceutical industry.

### 2. Literature Review

### 2.1. Descriptive Learning and Employee Engagement

Descriptive learning explains what had already happened in the organisation and the process involved in organisational learning. Descriptive learning also illuminates the nature and process of organisational learning on a deeper level. Information acquisition, interpretation and distribution are all part of descriptive learning. Cavallo et al. (2021) opined that information acquisition is gathering information to enhance competitiveness and business performance. According to the literature, the Nigerian pharmaceutical industry obtains its information through university education (Oguegbe et al. 2017; Joel et al.

Adm. Sci. 2023, 13, 81 3 of 12

2022). The National Institute for Medical Research (NIMR) and the National Institute for Pharmaceutical Research and Development (NIPRD) are two organisations that are also engaged in the research and development of medicines (Oseni 2017).

Information distribution explains how information is shared in the workplace among team members and employees (Nonaka 1994). Two modes of information are distributed, as described by (Huber 1991). These are explicit and tacit knowledge, respectively. The explicit experience can be explained, codified, articulated and expressed formally in reports, models and documents. While tacit knowledge is subjective and could be easy to speak, communicate and formalise, such as insights, know-how and personal experiences. Information interpretation occurs when organisations make meaning out of newly acquired information (Kahn 1990). Kahn (1990) discoursed that descriptive learning may be related to employee engagement. Consequently, descriptive learning enhances employees' focus and absorption of job roles and responsibilities. According to Valeri et al. (2020), employees become engaged and concerned with work for the adequate information, insights, know-how and personal experiences they gain from their workplace.

 $H_1$ . Descriptive learning increases chances of employee engagement.

## 2.2. Normative Learning and Employee Engagement

Normative learning is a multidimensional concept explaining how organisations move closer to the ideals. It is sometimes referred to as a learning organisation. Through personal mastery, mental models, shared visions, team building and systematic thinking, normative learning has been able to integrate learning at the individual, group, and organisational levels (Senge 2006). According to Senge (2006), personal mastery is learning at the individual employee level. The thought processes of those who practice mastery gradually shift. They are adept at using logic and instinct Dincu et al. (2022). Additionally, one must practice the act of continuous study, development, and improvement.

Similarly, mental models serve as the framework for a person's cognitive processes. The underlying presumption that people in organisations have is called a mental model. Their mental models influence employees' thinking and behaviour (Powell et al. 2018). However, shared vision starts at the individual level and progresses to the collective level over time. This occurs when employees within the organisation communicate their vision to one another. In team building, a team comprises several people (often fewer than twenty) who have complementary abilities and are committed to attaining particular objectives. The team members learn to think creatively and work together to increase knowledge effectively. Finally, systematic thinking aids in the discovery of patterns and connections inside the organisation. Systematic thinking organisations actively capture, transfer, mobilise, and create information to give them a competitive advantage in the changing world because they are aware of the world's overwhelming complexity and rapid change (Eisenberg et al. 2018). Employee engagement and normative learning have been found to be strongly correlated. More engaged workers produce more and are less likely to do anything to harm their reputation or overall organisational success (Kahn 1990). They work positively toward the organisation's strategic goals to establish a sustained competitive edge.

 $H_2$ . Normative learning increases chances of employee engagement.

### 2.3. Prescriptive Learning and Employee Engagement

Prescriptive learning is experiential learning in which knowledge is generated through modifications in employee experiences. Prescriptive learning recognises and actively uses learners' relevant life and learning experiences (Kolb 2014). It helps firms transfer information from experience, conceptualisation and reflection to experimentation. Prescriptive learning includes experience, which might be past or present organisational occurrences. The learner's capacity to assess their experiences by recreating them is a crucial component of experiential learning. Experience-based learning blends reflection, conceptualisation and experimentation in an all-encompassing way (Andresen et al. 2020). Reflection highlights

Adm. Sci. 2023, 13, 81 4 of 12

the mental activity that occurs as people digest their unprocessed experiences. Kolb's learning cycle states that when people have obtained experience through their work, they evaluate their knowledge.

As an aspect of prescriptive learning, conceptualisation explains when individuals consider the meaning of experience and their understanding of the world (Kolb 2014). As a result, this leads to them asking more critical questions concerning their experience. During conceptualisation, the individual begins to acquire more knowledge and may even alter what they know. The last phase of prescriptive learning is called experimentation. This is where organisations start to test their whole thinking patterns globally. The experimental stage is a cycle of events with a beginning and an ending. The experimentation cycle involves gathering information, testing ideas, spreading results to essential areas, and then adapting it for the following process, thereby beginning a new cycle of experimentation. Organisations that innovate also learn from experimentation. Ogueyungbo et al. (2019) explained that prescriptive learning encourages employees to go above and beyond to accomplish tasks for their company. Valeri et al. (2020) affirms that due to the practicality of prescriptive learning, employees may begin to engage and commit to work.

 $\mathbf{H_3}$ . Prescriptive learning increases chances of employee engagement.

### 2.4. Diagnostic Learning and Employee Engagement

Diagnostic learning is an innovative way of learning about the organisation's hidden parts to tackle its peculiar challenges. Diagnostic learning ensures that organisations hire human resource professionals to address issues and offer helpful advice. Diagnostic learning methods could either be closed or open. The focus of the closed systems is on the firm's internal activities, while the external operations are ignored. The open system paradigm is appropriate for a world that is continually changing and evolving (Tamunomiebi 2020). Therefore, differentiation and innovation become inevitable to diagnose issues properly. Adaptability is a dynamic, goal-oriented process that forces organisations to learn in a new environment (Ur Rehman et al. 2019). The high rates of change in today's business environment, mainly the Nigerian pharmaceutical industry, have made adaptability essential for competition. This industry is dynamic and prone to continuous and unexpected changes (Oseni 2017). Differentiation explains the development of a product with added values and benefits, seeming different or unique to give higher services and satisfaction to customers (Migdadi 2019). Lastly, innovation is implementing a new behaviour or idea about a service, method, product, policy, system, policy, and program. Introducing new products enables the organisation to have a sequence of procedures that expedite their adaptation to changes in the ever-dynamic business environment. According to Faiva et al. (2021), diagnostic learning fosters adaptiveness and innovativeness in an organisation. This motivates employee engagement expressed in persistent effort and active job tasks. The use of diagnostic learning has an impact on how engaged employees are. This results from well-implemented diagnostic learning making employees display proactive behaviour and take a right and ethical initiatives (Macey and Schneider 2008).

 $\mathbf{H_4}$ . Diagnostic learning increases chances of employee engagement.

# 2.5. The Moderating Role of Supervisory Innovative Support on Organisational Learning and Employee Engagement

Supervisory innovative support explains how employees feel about their supervisor's care for their well-being. Supervisors act as the organisation's agents in directing and evaluating employees' job performance (Zhang and Wang 2021). Supervisory innovative support combines the task-oriented actions of evaluating and executing work activities and relationship-oriented actions of being compassionate about employees' welfare interests, valuing their contributions, and expanding employees' beliefs regarding the organisation (Eisenberg et al. 2018). According to Joel et al. (2022) and Richard et al. (2020), supervisory innovative support has three dimensions: emotional, instrumental, and material support.

Adm. Sci. 2023, 13, 81 5 of 12

The first dimension of emotional support allows employers to give employees support and help them regulate their emotions. Employees that receive high emotional support experience a good synergy between their capabilities and objectives. Employees who receive emotional support are satisfied with their jobs and lives (Ding and Yu 2020). The second dimension of material support involves the provision of work-related help, such as time, training, financial services, expert advice, and the supply of relevant work-related resources (Arici 2018; Ojebola et al. 2020). With material support, supervisors provide onthe-job training to subordinates. During this training, supervisors help employees become familiarised with the organisational working environment. This gives employees hands-on experience by using equipment, machinery, tools and materials. The last dimension of instrumental support provides employees with adequate information and feedback. At times, it also happens that instrumental support can be perceived as not helpful and may cause feelings of incompetence. As a result, Uwannah et al. (2021) developed a self-esteem model built on the premise that employees' receiving instrumental support is not good or bad. It is dependent on the extent of self-threat and support that reveals the reaction of the receiver to the help received (Qaisar Danish et al. 2019; Uwannah et al. 2021).

The model foresees that when information is seen as self-supportive, it will evoke constructive reactions. Still, on the contrary, when information is grasped as self-threatening, adverse reactions will be elicited. We assume that supervisory innovative support can moderate the effect of organisational learning on employee engagement, as supervisory innovative support is represented by effective support systems. Employees with higher support are motivated to learn and have higher training transfer. However, the moderating role of supervisory innovative support on organisational learning and employee engagement has not been adequately addressed. Based on previous studies, we can assume that organisational learning will be strongly connected to employee engagement and promote job involvement and focus. Employees would strongly appreciate learning by equipping them with new knowledge to perform their roles confidently and with greater efficiency.

 $H_5$ . The relationship between organisational learning and employee engagement is moderated by supervisory innovative support.

### 3. Result

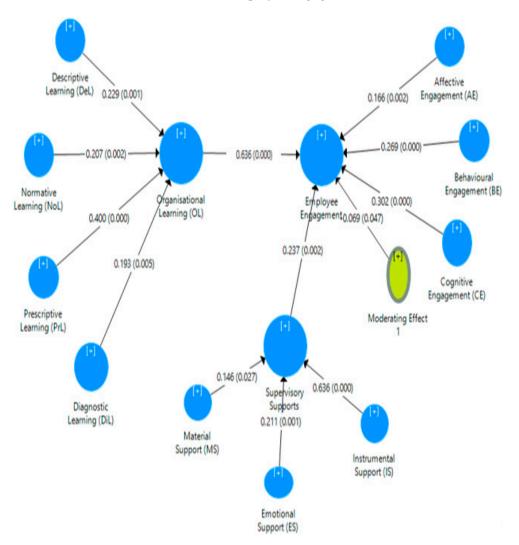
To determine if supervisory (material, emotional, and instrumental) support moderates the relationship between organisational learning and employee engagement, Partial Least Squares was employed. The study used four organisational learning indicators as separate constructs (descriptive, diagnostic, prescriptive and normative learning). In contrast to the three employee engagement dimensions, behavioural engagement and cognitive engagement were utilised as dependent concepts. The three types of supervisory innovative support (material, emotional, and instrumental support) were used as moderating variables. The indications for all observed variables were assessed on a scale of 1 to 5, with one (1) being strongly disagreed and five (5) being highly agreed. Each multivariate premise was verified twice before the analysis. The data were analysed using *p*-values, R-square values, path coefficients, and *t*-statistics. As depicted in Figure 1, the path coefficient controls the direction and magnitude of the relationship between organisational learning and employee engagement. The *p*-value, as shown in Figure 1, determines the probability that a difference was discovered by chance. The path co-efficient analysis is displayed in Table 1 and illustrates how the model's variables interact.

The statistical analysis for hypothesis one was accepted and revealed that descriptive learning has increased chances of employee engagement at ( $\beta$  = 0.717,  $R^2$  = 0.514, t-statistics = 16.459 > 1.96, p-value = 0.000 < 0.05). The Path coefficient of 0.717 indicates a significant connection between descriptive learning and employee engagement in Nigerian pharmaceutical enterprises. The  $R^2$  value of 0.514 explains that descriptive learning accounts for 51.4% of the variation in employee engagement.

Likewise, the statistical analysis for the second hypothesis was accepted ( $\beta$  = 0.873,  $R^2$  = 0.762 *t*-statistics = 42.886 > 1.96, *p*-value = 0.000 < 0.05). The Path coefficient of 0.873

Adm. Sci. 2023, 13, 81 6 of 12

indicates a strong correlation between normative learning and employee engagement in Nigerian pharmaceutical enterprises. The  $\rm R^2$  value of 0.762 shows that normative learning accounts for 76.2% of the variance in employee engagement.



**Figure 1.** PLS Bootstrapping model with  $\beta$  and p values of supervisory (material, emotional and instrumental) supports do not moderate the relationship between organisational learning and employee engagement in the pharmaceutical industry.

The findings also revealed that the fourth hypothesis was accepted ( $\beta$  = 0.866,  $R^2$  = 0.750, t-statistics = 34.376 > 1.96, p-value = 0.000 < 0.05). The Path coefficient of 0.866 indicates a strong correlation between prescriptive learning and employee engagement in the Nigerian pharmaceutical industry. Prescriptive learning explains 75.0% of the variance in employee engagement, as suggested by the  $R^2$  value of 0.750.

The findings of hypothesis four were also accepted and showed that diagnostic learning significantly influenced employee engagement. Similarly, the statistical analysis revealed that diagnostic learning increases the chances of employee engagement at ( $\beta$  = 0.817,  $R^2$  = 0.668 t-statistics = 31.317 > 1.96, p-value = 0.000 < 0.05). The Path coefficient of 0.817 indicates a strong correlation between diagnostic learning and employee engagement in Nigerian pharmaceutical enterprises. Diagnostic learning explains 66.8% of the variance in employee engagement, based on the  $R^2$  value of 0.668.

Adm. Sci. 2023, 13, 81 7 of 12

**Table 1.** Path coefficients for organisational learning, supervisory innovative support and employee engagement.

Variables	Path Co-Efficient	Std. Dev.	t Statistics	p Values
Descriptive Learning → Employee Engagement	0.717	0.051	16.459	0.000
Normative Learning → Employee Engagement	0.876	0.032	42.886	0.000
Prescriptive Learning → Employee Engagement	0.866	0.064	34.376	0.000
Diagnostic Learning → Employee Engagement	0.817	0.063	31.317	0.000
Organisational Learning → Employee Engagement	0.636	0.062	10.220	0.000
Supervisory Innovative Support → Employee Engagement	0.237	0.077	9.502	0.002
Moderating Effect (SS) $\rightarrow$ Employee Engagement	0.069	0.035	1.989	0.047
Emotional Support → Supervisory Innovative Support	0.221	0.061	3.447	0.001
Material Support → Supervisory Innovative Support	0.146	0.066	2.217	0.027
Instrumental $\hat{Support} \rightarrow \hat{Supervisory}$ Innovative $\hat{Support}$	0.635	0.061	10.219	0.000
R Sqi	uare (R <sup>2</sup> )			
	R Square (R <sup>2</sup> )		R Square (R <sup>2</sup> ) Adjusted	
Descriptive Learning → Employee Engagement	0.514		0.509	
Normative Learning → Employee Engagement	0.762		0.755	
Prescriptive Learning → Employee Engagement	0.750		0.743	
Diagnostic Learning → Employee Engagement	0.668		0.664	
Organisational Learning → Employee Engagement	0.810		0.806	
Supervisory Innovative Supports → Employee Engagement	0.719		0.716	

For all factors, including organisational learning, supervisory innovative support, and employee engagement, the research demonstrates significant associations at 0.05. Employee (affective, behavioural, and cognitive) engagement and organisational learning have a substantial positive correlation of ( $\beta = 0.636$ ,  $R^2 = 0.810$ ; t-statistics = 10.220 > 1.96, p-value = 0.000 < 0.05). The R-square value of 0.810 shows that 81% of the variation in affective, behavioural, and cognitive engagement may be attributed to organisational learning. Additionally, it was found that employee engagement (affective, behavioural, and cognitive) is substantially connected with supervisory innovative support at  $(\beta = 0.237, R^2 = 0.719; t$ -statistics = 9.502 > 1.96, p-value = 0.002 < 0.05). Therefore, the fifth hypothesis on the relationship between organisational learning and employee engagement being moderated by supervisory innovative support was accepted. The R-square value of 0.719 indicates that the support of a supervisor may account for 71.9% of the variation in an employee's affective, behavioural, and cognitive engagement. The results also showed that the association between organisational learning and employee (affective, behavioural, and cognitive) engagement is moderated by supervisory innovative support at ( $\beta = 0.069$ , t-statistics = 1.989 > 1.96, p-value = 0.047 < 0.05). Supervisory innovative support was positively connected with employee engagement (affective, cognitive, and behavioural), while instrumental support was more significant ( $\beta = 0.635$ , t-statistics = 10.219 > 1.96, p-value = 0.000 < 0.05). Emotional support from supervisors had a substantial impact on the significant connection between organisational learning and employee (affective, behavioural, and cognitive) engagement at ( $\beta$  =0.221, t-statistics = 3.447 > 1.96, p-value = 0.001 < 0.05). Material support also significantly explains the supervisory innovative supports, but has the least significant influence between organisational learning and employee (affective, cognitive, and behavioural) engagement at ( $\beta = 0.146$ , t-statistics = 2.217 > 1.96, p-value = 0.027 < 0.05). Figure 1 shows the results of a bootstrapping investigation to verify the relevance of the model's variables (i.e., the *t*-values and the *p*-values).

The data in Figure 1 show the projected variability among the variables. It should be noted that the value increases with the magnitude of the impact on organisational learning. The significance of organisational learning, supervisory innovative supports, and employee engagement were confirmed using the t-statistical test, as seen in Figure 1.

Adm. Sci. 2023, 13, 81 8 of 12

### 4. Methodology

The main goal of this study is to ascertain the extent to which the relationship between organisational learning and employee engagement is moderated by supervisory innovative support, in contrast to how organisational learning was evaluated using descriptive, diagnostic, prescriptive, and normative variables. Supervisory innovative support was evaluated using the material, instrumental, and emotional support. Cognitive, behavioural, and affective engagement were used to measure employee engagement. A descriptive research design was used in this study to clearly and vividly describe the situation. The data were analysed using SPSS (PLS) to determine the goodness-of-fit level and the moderating effect of supervisory help on organisational learning and employee engagement.

The degree of dependability was evaluated using a factor model, and the level of fitness and concept validity was assessed using discriminant and convergent analyses. The study's sample consisted of the employees working in the six pharmaceutical companies chosen for this study. According to the pharmaceutical manufacturing association of Nigeria, these firms were deemed to be the "best" in terms of excellence, research and innovation (Pharmaceutical Manufacturing Group of Manufacturers' Association of Nigeria 2019). These firms were also chosen because they export pharmaceutical products to the Economic Community of West African State. It is believed that the export culture of these firms is a function of continuous learning and engagement. Since it would be impractical to provide questionnaires to every employee at the listed pharmaceutical firms, the study established a sample size of 541. Taherdoost (2017) cited Gill et al.'s (2010) sample size determination table to determine the sample size for this study. In this study, convenience, stratified, and purposive sampling methods were all employed. This survey was purposive in nature because it only considered employees at the selected pharmaceutical companies. Stratified sampling was used after the population was divided into multiple strata. Employees from each stratum had an equal chance of being chosen. All the staff members from the six (6) pharmaceutical companies chosen make up this study's sampling frame. To determine the level at which supervisory innovative support influences the relationship between organisational learning and employee engagement, employees from all categories were questioned. A standardised 5-point Likert scale questionnaire was used to collect the data. This is essential for determining how strongly the participants agree with the items on the instrument. To ensure that the data were sufficient and accurate, the guidelines for the assumptions of analysis set forth by Hair et al. (2009) were painstakingly followed. As a result, the variance inflation factor was larger than 5.0, and the acceptability inflation factor was greater than 0.2. The data were assessed for normality and linearity using the Mahalanobis Distance Criterion, and 107 individuals were eliminated from the initial sample of 541. The listwise deletion technique was used to eliminate the missing data, which made up less than 5% of the total. Four hundred thirty-four (434) employees made up the study's final sample, which is thought to be a representative sample of the population because it represents 80.2% of respondents. After being altered, the measuring model's validity, unidimensionality, and reliability were evaluated. CFA loading, construct composite reliability, error variance, and construct average variance extracted estimate were used to evaluate reliability. Building composite dependability and CFA loading have minimum standards of 0.70 and 0.80, respectively.

### 5. Discussion Conclusion and Recommendation

The study provides evidence that a significant relationship exists between organisational learning (descriptive, normative, prescriptive and diagnostic learning) and employee engagement. This study also reveals that supervisory innovative support strongly moderates the connection between organisational learning and employee engagement. According to the descriptive data, most respondents agree that their managers provide the right advice on doing their tasks more efficiently, enabling organisational growth and innovation through employee engagement. According to the descriptive data, most respondents said that organisations should regularly assess their efforts to support supervisors and encour-

Adm. Sci. 2023, 13, 81 9 of 12

age open communication among staff members. The descriptive data also showed that most respondents believed their supervisor cared about their welfare. The inferential statistics also revealed that supervisory innovative support moderates the relationship between organisational learning and employee engagement (emotional, instrumental, and material).

Additionally, instrumental support makes a huge difference in how engaged personnel are in the Nigerian pharmaceutical sector. The study discovered that instrumental support is the most accurate predictor of supervisory innovative support. Due to instrumental support, employees receive feedback on how well they do in their job-related activities. According to this study, receiving feedback on a worker's performance at work encourages them to concentrate and reflect upon what they have learned, encouraging them to engage in tasks innovatively. This supports the assertion made by Qaisar Danish et al. (2019) and Uwannah et al. (2021).

Similarly, in the Nigerian pharmaceutical industry, emotional support plays a significant role in employee engagement. The study found that employee engagement and organisational learning are both positively impacted by emotional support. In other words, emotional support fosters an environment favourable to organisational learning while encouraging employee innovation. This result agreed with Valeri et al. (2020) and (Ogueyungbo et al. 2019) arguments. They hypothesised that workers who receive emotional support are content in their positions. They exhibit innovativeness that fosters employee engagement and an environment conducive to organisational learning.

Material support expounds employees' feelings of being valued and heard. Material support involves the provision of work-related help such as time, training, financial services, expert advice, and the supply of relevant work-related resources. Material support has been shown to moderate organisational learning and employee engagement, although having the least predictive value. The findings of this study align with the investigations of Zhang and Wang (2021) and Ding and Yu (2020), which indicated that supervisory innovative support, such as emotional, material, and instrumental support, increases organisational learning significantly. According to the studies, this can create an environment that encourages employees to stay committed to their jobs and decreases the likelihood of them quitting.

According to Richard et al. (2020) supervisory innovative support is crucial for organisational learning since it increases employee commitment and dedication. Regarding the material with support (which relates to training and professional guidance) with the lowest predictive value, it is widely believed that today's workers, particularly those in the millennial generation and younger, frequently "job-hop". Simply put, they leave their jobs or switch jobs considerably more regularly than their preceding generations. They often look out for themselves and their next career moves rather than sticking with one organisation. This pattern emphasises the least predictive value regarding the moderating influence of supervisory innovative support found in the study. The study's findings suggest that supervisory innovative support in the Nigerian pharmaceutical industry, including material, emotional, and instrumental support, strengthens the relationship between organisational learning and employee engagement.

As a result, the article recommends that pharmaceutical companies clarify their policies and culture to employees so that material support can lead to high employee engagement through organisational learning. Pharmaceutical firms should also provide financial incentives based on employee duration or distinctive contributions to company goals.

### 6. Contribution to Knowledge

- 1. To explore the implications of organisational learning on employee engagement, the study provides a helpful context of concepts, facts, and figures that manufacturers, wholesalers, retailers, national regulators, government agencies, and other stakeholders in the pharmaceutical business might embrace.
- 2. The distinctive function of supervisory innovative support as a precursor of employee engagement has also been highlighted by this study.

Adm. Sci. 2023, 13, 81 10 of 12

3. The study is a platform for upcoming research on organisational behaviour, learning and development.

4. The study provides a viable paradigm that combines employee engagement, supervisory innovative support, and organisational learning. Figure 2 shows a picture of this model.

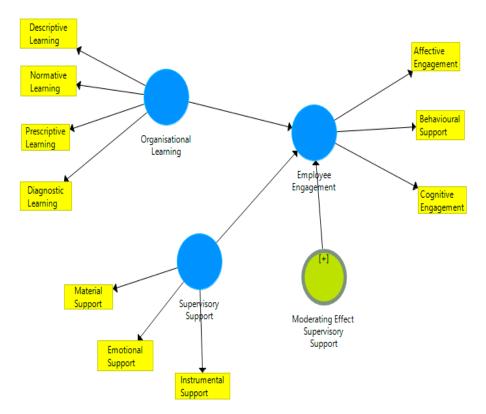


Figure 2. Organisational learning, supervisory innovative support and employee engagement model.

This model examined the resultant effects and relationship between organisational learning (descriptive, normative, prescriptive and diagnostic), supervisory innovative support (instrumental, emotional and material) and employee engagement (affective, behavioural and cognitive). Again, the model could guide the pharmaceutical industry, decision-makers, human resource practitioners, and managers to adopt the best strategies for engaging dedicated and committed employees. Integrating the model into the overall goals of the industry will allow them to have employees with distinctive capabilities that will be productive and actively engaged in descriptive, normative, prescriptive and diagnostic learning. This will therefore promote the image of the industry.

### 7. Limitation/Further Studies

The limitations of this study include the following:

- 1. The study could only exhaust some definitions of supervisory innovative support, emotional, instrumental, material support and other relevant concepts.
- In this study, the researchers used supervisory innovative support as a moderating variable between organisational learning and employee engagement; future studies can use other moderating variables such as innovative employee behaviour, leadership style, employee well-being, etc.
- 3. It is crucial to identify the limitations and research gaps. Nigeria is divided into six geopolitical zones. Only six pharmaceutical companies in Lagos, Nigeria, were considered for this study. This restricts the results' applicability to pharmaceutical companies in other geopolitical regions of Nigeria. Future researchers could expand the study's scope to include additional Nigerian regions.

Adm. Sci. 2023, 13, 81 11 of 12

**Author Contributions:** Conceptualization, O.P.S. and O.P.A.; validation, C.L.M.; investigation O.P.S.; writing—review and editing, O.O.J.; project administration, M.A.O.; resources, O.O., C.L.M. and E.E.I. All authors have read and agreed to the published version of the manuscript.

Funding: Covenant University funded the Article Processing Charges (APC) of this article.

**Institutional Review Board Statement:** The study does not pose any risk to any participant. Therefore, the ethical review and approval were waived.

Informed Consent Statement: All the participants got informed consent for this study.

Data Availability Statement: Available based on request.

**Acknowledgments:** The authors would like to appreciate Covenant University Center for Research and Innovation (CUCRID) for sponsoring the publication of this article.

**Conflicts of Interest:** The authors declared no conflict of interest.

#### References

Akande-Sholabi, Wuraola, Yusuff Adebayo Adebisi, Ayomide Bello, and Olayinka Stephen Ilesanmi. 2020. COVID-19 in Nigeria: Is the pharmaceutical sector spared? *Public Health in Practice* 1: 100044. [CrossRef] [PubMed]

Amah, Okechukwu E. 2018. Employee engagement in Nigeria: The role of leaders and boundary variables. SA Journal of Industrial Psychology 44: 1–8. [CrossRef]

Andresen, Lee, David Boud, and Ruth Cohen. 2020. Experience-based learning. In *Understanding Adult Education and Training*. Abingdon-on-Thames: Routledge, pp. 225–39.

Aragon, María Isabel Barba, Daniel Jiménez Jiménez, and Raquel Sanz Valle. 2020. Training and performance: The mediating role of organisational learning. *International Journal of Human Resource Management* 10: 551–71.

Arici, Hasan Evrim. 2018. Perceived supervisor support and turnover intention: Moderating effect of authentic leadership. *Leadership & Organization Development Journal* 39: 899–91.

Cavallo, Angelo, Silvia Sanasi, Antonio Ghezzi, and Andrea Rangone. 2021. Competitive intelligence and strategy formulation: Connecting the dots. *Competitiveness Review: An International Business Journal* 31: 250–275. [CrossRef]

Chiva, Ricardo, Pervez Ghauri, and Joaquín Alegre. 2014. Organizational learning, innovation and internationalization: A complex system model. *British Journal of Management* 25: 687–705. [CrossRef]

Dincu, Ana-Mariana, Ioana Mihaela Bălan, Manuela-Dora Orboi, Diana Cornelia Marin, and Claudia Sîrbulescu. 2022. Entrepreneurship—An Opportunity for Young People in Romania. *Scientific Papers: Animal Science & Biotechnologies/Lucrari Stiintifice: Zootehnie si Biotehnologii* 55: 246–50.

Ding, He, and Enhai Yu. 2020. How and when does perceived supervisor support for strengths use influence employee strengths use? The roles of positive affect and self-efficacy. *Journal of Psychology in Africa* 30: 384–89. [CrossRef]

Edmonstone, E. 2018. Organisational learning. Leadership in Health Services 31: 434-40. [CrossRef] [PubMed]

Eisenberg, Alona, Jelena Davidova, and Irena Kokina. 2018. The Interrelation between organisational learning culture and organisational citizenship behavior. *Rural Environment Education* 11: 11–15.

Faiva, Edward, Hashim Talib Hashim, Mustafa Ahmed Ramadhan, Shingin Kovona Musa, John Bchara, Yahya Dheyaa Tuama, Yusuff Adebayo Adebisi, Mustafa Hayder Kadhim, Mohammad Yasir Essar, Shoaib Ahmad, and et al. 2021. Drug supply shortage in Nigeria during COVID-19: Efforts and challenges. *Journal of Pharmaceutical Policy and Practice* 14: 1–3. [CrossRef] [PubMed]

Gill, John, Phil Johnson, and Murray Clark. 2010. Research methods for managers. Journal of Business and Economics 41: 77-85.

Hair, Joseph F., William C. Black, Barry J. Babin, Rolph E. Anderson, and Ronald L. Tatham. 2009. *Análise multivariada de dados*. Porto Alegre: Bookman Editora.

Huber, George P. 1991. Organizational learning: The contributing processes and the literatures. *Organization Science* 2: 88–115. [CrossRef]

Hussain, Ibiwani Alisa, Noormala Amir Ishak, and Benjamin Yin Fah Chan. 2016. The relationship between organizational learning and employee engagement: The perspective of young employees from commercial banks in Malaysia. *Advances in Business Research International Journal* 2: 1–11. [CrossRef]

Joel, Opeyemi, Chinonye Moses, Ebeguki Igbinoba, Olokundun Maxwell, Odunayo Salau, and Adejana Omobolanle. 2022. Psychological contract and employee performance in the Nigerian manufacturing industry: A conceptual review. *Academy of Entrepreneurship Journal* 28: 1–10.

Kahn, William A. 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal* 33: 692–724. [CrossRef]

Kolb, David A. 2014. Experiential Learning: Experience as the Source of Learning and Development. Upper Saddle River: FT Press.

Macey, William H., and Benjamin Schneider. 2008. The meaning of employee engagement. *Industrial and Organizational Psychology* 1: 3–30. [CrossRef]

Migdadi, Mahmoud M. 2019. Organizational learning capability, innovation and organizational performance. *European Journal of Innovation Management* 24: 151–72. [CrossRef]

Adm. Sci. 2023, 13, 81 12 of 12

- Nonaka, Ikujiro. 1994. A dynamic theory of organizational knowledge creation. Organization Science 5: 14-37. [CrossRef]
- Oguegbe, Tochukwu M., N. C. Etodike, and R. Ugwa. 2017. Perceived supervisor's support and job insecurity as predictors of employee anxiety. *UJAH: Unizik Journal of Arts and Humanities* 18: 450–65. [CrossRef]
- Ogueyungbo, O. Opeyemi, Chinonye L. Moses, and Igbinoba Ebeguki. 2019. Organizational learning and employee Engagement: A literature review. Paper presented at the 5th International Conference on Advances in Education and Social Sciences, Istanbul, Turkey, October 21–23.
- Ojebola, O. O., Adewale Omotayo Osibanjo, A. A. Adeniji, Odunayo Paul Salau, and Hezekiah Olubusayo Falola. 2020. Organisational citizenship behaviour and its influence on manufacturing firms survival in Nigeria: A systematic review. *Academy of Strategic Management Journal* 19: 1–14.
- Oseni, Yejide Olukemi. 2017. Pharmacists' distribution in Nigeria; implication in the provision of safe medicines and pharmaceutical care. *International Journal of Pharmacy and Pharmaceutical Sciences* 9: 49–54.
- Pharmaceutical Manufacturing Group of Manufacturers' Association of Nigeria. 2019. Report on the Status of Nigerian Pharmaceutical Industry. Lagos: Pharmaceutical Manufacturing Group of Manufacturers' Association of Nigeria.
- Powell, Alison, Huw T. O. Davies, and Sandra M. Nutley. 2018. Facing the challenges of research-informed knowledge mobilization: 'Practising what we preach'? *Public Administration* 96: 36–52. [CrossRef]
- Qaisar Danish, Rizwan, Fatima Shahid, Shahar Bano, Hafiz Fawad Ali, and Asad Afzal Humayon. 2019. Supervision support and turnover intension: Impact of employee's training in banking sector of Pakistan. European Online Journal of Natural and Social Sciences: Proceedings 8: 121.
- Richard, Orlando C., O. Dorian Boncoeur, Hao Chen, and David L. Ford. 2020. Supervisor abuse effects on subordinate turnover intentions and subsequent interpersonal aggression: The role of power-distance orientation and perceived human resource support climate. *Journal of Business Ethics* 164: 549–63. [CrossRef]
- Senge, Peter M. 2006. The Fifth Discipline: The Art and Practice of the Learning Organization. New York: Doubleday.
- Taherdoost, Hamed. 2017. Determining sample size; how to calculate survey sample size. *International Journal of Economics and Management Systems* 2: 6–11.
- Tamunomiebi, M. D. P. 2020. Employee Loyalty and Organisational learning Manufacturing Companies in. *International Journal of Management and Marketing Systems* 9: 15–20.
- Ur Rehman, Shafique, Anam Bhatti, and Naveed Iqbal Chaudhry. 2019. Mediating effect of innovative culture and organizational learning between leadership styles at third-order and organizational performance in Malaysian SMEs. *Journal of Global Entrepreneurship Research* 9: 1–24. [CrossRef]
- Uwannah, Ngozi Caroline, Constance Ndidi Onyekachi, and Bankole Adeyemi Filade. 2021. Hardiness, Supervisor Support and Work Engagement: Empirical Evidence from Tertiary Institutions in Ogun State, Nigeria. *American Journal of Applied Psychology* 9: 8–14. [CrossRef]
- Valeri, Meristika, Abdul Rahim Matondang, and Elisabet Siahaan. 2020. The influence of employee participation and employee readiness to employee commitments against corporate strategy (spin off) through organizational support as a moderating variable on BPD banks. *International Journal of Research and Review* 7: 56–71.
- Zhang, Wei, and Xue-Jun Wang. 2021. An Understanding of Implicit Followership Toward New Employees' Self-Efficacy: The Mediating Role of Perceived Supervisor Support. Frontiers in Psychology 12: 4401. [CrossRef] [PubMed]

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.