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RETRACTED: Assessing the employees' efficiency and adaptive performance for sustainable human resource management practices and transactional leadership: HR-centric policies for post COVID-19 era

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The utilization of sustainable organizational human resource management (HRM) practices as predictors of adaptive performance has received little attention, despite the importance of adaptive performance in improving organizational efficiency. This study explores the relationship between HRM activities (training, performance appraisal, job enlargement, employee involvement, and work enrichment) and employees' adaptive performance using the resource-based view (RBV) theory. It also looked into the role of transactional leadership in regulating these correlations to draw up the policies for the post-pandemic era. A quantitative study is conducted and a questionnaire was distributed randomly among the Ministry of Health of the Sultanate of Oman and 233 people have participated in the questionnaire survey. PLS-SEM was utilized to analyze the data. In this study, performance appraisal, job enlargement training, and work enrichment all have a considerable influence on employees' adaptive performance. Furthermore, transactional leadership moderates the linkage between job enrichment and employee adaptive performance. As a result, the higher the organization's attention on certain HR policies, the better their adaptive performance. HR practices are important predictors of adaptive performance; thus, managers and practitioners should take into account workers' adaptability to encourage more adaptive behavior in the workplace. This article further discusses the study's weaknesses as well as future research directives on HRM practices and adaptive performance.

KEYWORDS

job enlargement, performance appraisal, transactional leadership, sustainable human resources, post covid

1 Introduction

Employees' ability to manage crises, react swiftly, and confront new difficulties becomes increasingly vital as the environment grows more chaotic (Charbonnier-Voirin & Roussel, 2012; Chua et al., 2021). Prior views on job performance have failed to account for the full range of human actions that add to job success in unpredictably complex systems. Adaptive performance has garnered a lot of attention as a technique to better understand the dynamic nature of employee performance in today's fast-paced business environment (Park, & Park, 2019; Huntsman et al., 2021). The importance of openly addressing workers' flexibility to changes in the workplace is demonstrated through adaptive performance. Adaptive performance can lead to good consequences such as improved performance capacity and professional achievement on a personal level (Shoss et al., 2020; Mc Loughlin, & Priyadarshini, 2021). Organizational outcomes such as change in management, organizational learning, and meeting changing customer expectations can all be aided by employee adaptability (Dorsey et al., 2010). It can help businesses innovate, maximize their current skills, and adapt to changing surroundings (Ahmad et al., 2019; Shoss et al., 2020).

Even though the number of existing pieces of literature from many sectors has expanded over the last decade, there is a need to synthesize previous research from various angles. The jargon employed to discuss workers' adaptive performance, for example, may be perplexing to readers (e.g., agility, flexibility, adaptability, and adaptive conduct). Furthermore, several studies in a variety of nations have looked into the link between HRM practices and subjective and financial metrics of organizational success (Moideenkutty et al., 2011). The association between HRM practices and employee adaptive performance, as well as the moderating role of transactional leadership, has not been studied in countries of the Middle East such as the Sultanate of Oman, to our knowledge.

Transactional leadership as a moderator has been introduced in this study to look at the association between HRM practices and employee adaptive performance in the Sultanate of Oman. Since HRD has identified performance as a critical issue, employee adaptable performance should be a top concern (Al Asbahi et al., 2019; Kang et al., 2021). Organizations must analyze and improve people's adaptable performance concerning their usual work performance since the capacity to adapt has become increasingly important. HRD scholars must include adaptive performance as an extension of conventional performance since it reflects the current changing business environment. Only a few studies, on the other hand, have looked at ways to improve workers' flexibility (Islam et al., 2018; Huntsman et al., 2021).

As a result, the authors of this research work feel that HRD may help with the identification of reasons as well as the creation of a plan and approaches for boosting employee adaptability. HRD's emphasis on building capabilities and increasing performance may aid organizations in identifying methods to increase workers' adaptive performance by offering learning and development opportunities and altering corporate culture and practices. More studies on HRD research is required to better understand workers' adaptable performance and to aid businesses in improving their employees' adaptive performance to survive and prosper (Park, & Park, 2019; Dai et al., 2021). However, despite the importance of adaptive performance in performance enhancement, as demonstrated by the "Strategic HR" literature, which consistently found connections between packages of HR practices and various indices of firm performance, the function of organizational HRM practices as predictor variables of adaptive performance remains underexplored (Fabiu et al., 2020). Therefore, this study looks at the impacts of performance evaluation, training, work enrichment, job expansion, and employee involvement on workers' adaptive performance, as well as the impact of transactional leadership on these crucial linkages.

The main goal of this research is to add to the body of knowledge on adaptive performance by looking at the impact of HRM practices (performance evaluation, training, work enrichment, job enlargement, and employee engagement) on adaptive performance prediction. This study aims to contribute to understanding the reasons for under-researched adaptive performance, particularly in developing countries, according to the comments of Krijgsheld et al. (2022) on the absence of HRM studies from developing countries like Oman.

2 The resource-based view theory

According to an earlier study, RBV is a solid rationale for implementing strong HR practices (Newman & Sheikh, 2014). According to the RBV, "human resource systems can contribute to sustained competitive advantage through facilitating the development of competencies that are firm-specific, produce complex social relationships, are embedded in a firm's history and culture, and generate tacit organizational knowledge," as stated previously (Kuvaas, 2007; Qi and Wang, 2106).

The RBV method seems to give a solid theoretical platform for examining differences in organizational performance, particularly in terms of human resources. This is because HR practices may contribute to the development of skills and knowledge that boost competitiveness and performance (Mu et al., 2018). The idea has become a popular one when it comes to strategic HRM and how human resources and associated HR

practices may affect corporate performance. In addition to human capital, the RBV considers intellectual capital, human resource strategy, and organizational performance. RBV has made a substantial contribution to the area of human resource management, which is expanding (Barpanda and Bontis, 2021) and has been eagerly adopted by both practitioners and scholars in the HRM profession (Alemzero et al., 2021).

3 Literature Review

3.1 Performance appraisal

Employees are a critical investment for firms because they have the power to affect organizational success (Ogiemwonyi et al., 2020). In the competitive environment, employees may affect the growth of the organization. As the ones responsible for employee performance for organizational success and competitive edge, firms are increasingly going to invest in various development activities such as coaching, development centers, and career planning to improve performance (Al-Hussaini et al., 2019). Performance evaluations have been shown to have a major impact on an employee's ability to enhance their performance and effectiveness. Performance appraisal is the process of reviewing an employee's performance over some time (DeNisi and Smith, 2014).

It refers to "activities through which organizations seek to assess employees and develop their competence, enhance performance and distribute rewards. It sometimes becomes a part of a wider approach to integrating HRM strategies known as performance management" (Al-Busaidi et al., 2021). Although the performance appraisal system is recognized as the most significant of all human resource activities (Shrivastava and Purang, 2011), limited studies have been conducted on the improvement of employees' performance (DeNisi and Pritchard, 2006).

This might be one of the reasons why most companies focus on the overall effectiveness and efficiency of their performance appraisal rather than the influence on employee performance (Longenecker & Fink, 2017). Establishing an effective performance appraisal is one of the most challenging tasks for HR professionals in terms of performance growth (Harrington and Lee, 2015). As a consequence, research into how performance evaluation systems may be made more acceptable to employees and how they affect employee performance is urgently needed (Sharma & Sharma, 2017; Sabiu et al., 2018).

3.2 Performance appraisal and adaptive performance

Firms invest in their staff to improve human capital and gain a competitive edge. They similarly examine their human capital in an attempt to determine staff development needs and changes to achieve better performance. To get the greatest outcomes,

organizations provide feedback to employees and anticipate future development needs, using performance evaluation or employee evaluation tools. To be recognized and rewarded, employees must have their work assessed (Levy et al., 2015). Employees who are satisfied with their performance reports are more inclined to participate in training programs, which may help them improve their overall performance. Furthermore, a strong and appropriate performance review has the potential to improve both employee performance and healthcare quality (Majidi et al., 2021). According to Kuvaas (2007) and Van Woerkom and Kroon (2020), one of the main goals of performance appraisal is to motivate individuals to improve their performance. As a consequence, we expect a performance evaluation that aids employees in discovering, developing, and employing the attributes that allow them to perform at their best to have a positive influence on their adaptive performance. As a result, we came up with the following hypothesis:

H1. Performance appraisal positively affects adaptive performance.

3.3 Training

People must be taught to adapt to workplace changes as a result of dynamic changes in the work process and the global competitive environment (Tumi et al., 2021). Organizations must provide proper and advanced training to exchange key skills and knowledge. Training is the most appropriate form of motivation for a company to increase its employees' abilities. Training affects people's general self-efficacy, which leads to increased motivation and confidence (Tai, 2006). Training is a process in which people gain a particular level of competence to help the company accomplish and its goals (Abbas and Ali, 2021). Al-Ali et al. (2016) stated that "training prepares people to do reviews their present jobs and development prepare employees needed knowledge, skills, and attitude;" authors also argued that training prepares people to do reviews of their current occupations. To put it in context, training is a key tool for a company to fulfil its employees' rising need for current knowledge and abilities. HR managers assist employees in carrying out their obligations without stress by instilling confidence in their abilities *via* effective training (Mangkunegara and Waris, 2015; Lee and Wei, 2015).

There is substantial link between training and employee motivation to perform (Hughes et al., 2018; Jaworski et al., 2018). Al-Hussaini et al. (2019) defined training as a set of activities intended to enhance employees' knowledge, talents, and competencies, resulting in increased motivation and, as a result, big positive outcomes. Effective training programs are considered a tool to improve employees' attitudes and behaviors. Structured training has a considerable impact on nurse performance, according to research done at a Jordanian military hospital (Al-Ali et al., 2016; Ogiemwonyi et al., 2020).

Teaching nurses the required skills and knowledge to deal with patients, they claim, will increase hospital productivity.

3.4 Training and adaptive performance

Employee training is a popular HR strategy since it enhances employees' abilities and experiences, enabling them to engage in more positive behaviors (Nasuridin et al., 2015; Hassan et al., 2022). Staff training is critical since it determines whether a company succeeds or fails.

According to Han and Williams (2008), training may help employees to adapt to an unanticipated situation by providing them with not just the essential skills and knowledge that extend beyond their current jobs but also by supporting them in adapting to such conditions. Similarly, Chen et al. (2005) discovered that employee adaptability training programs help workers to develop the essential skills, experience, and knowledge to perform adaptively in the workplace. If a person is exposed to settings that need organizational modifications, for example, he or she will be able to function effectively in a future scenario that requires similar adaptation (Şahin and Gürbüz, 2014). Experience with similar events may be beneficial in improving adaptive performance (Pulakos et al., 2006). Thus, we hypothesize that

H2. Training positively affects adaptive performance.

3.5 Job enrichment

Job enrichment is described as a wider range of job content in the workplace that is achieved *via* employee autonomy. If employees are included in the decision-making process, they will feel more accountable for their work-related behavior and outcomes. Employees' ability to juggle many tasks contributes to a more enjoyable work environment and motivates them to enhance their performance (Garg and Rastogi, 2006). Dai et al. (2021) defined job enrichment as the incorporation of elements into job performance that favors many different tasks to be done, the autonomy about the work that needs to be done, greater involvement in decision-making, increased responsibility, performance feedback, and participation in change initiatives. Employees who have received job enrichment may arrange their schedules and be in charge of their responsibilities while at work. Employee autonomy may reduce work-related family conflicts while simultaneously boosting job satisfaction. According to research, employees who have the option to choose their working hours and processes are more motivated (Baral and Bhargava, 2010; Bayo-Moriones et al., 2019).

The value of autonomy may be seen in group performance as well. Team members that have the flexibility to choose team members with the requisite skills and expertise may be more creative and productive in attaining the organization's goals (Yang and Choi, 2009). According to various studies, improving

employees' work experience improves their motivation and job devotion. In addition, work enrichment significantly enhances self-control, self-actualization, and self-respect (D'Souza et al., 2022).

3.6 Job enrichment and adaptive performance

As stated in a study by Azeez and Abimbola (2016), job enrichment was shown to be a significant predictor of employee happiness, motivation, and performance at public colleges in Nigeria. In the study, job enrichment was found to provide a variety of benefits to employees, including the development of new skills, a sense of purpose in one's work, and the recognition and appreciation of co-workers and superiors. It was also found to increase employees' sense of personal responsibility, sense of accomplishment, and involvement in decision-making. To their surprise, individuals want workplace autonomy since it allows them to make their judgments about how to fulfil their duties. According to some studies, work enrichment is necessary to encourage employees to carry out their responsibilities and achieve high levels of job performance (Van Yperen et al., 2016).

In addition, job enrichment gives workers more control over how they work and how much time they spend on it. Reducing stress at work and inspiring employees to perform well may be aided by this (Tumi et al., 2021). Employees need to be exposed to different types of duties to increase their motivation. Workers might feel more like people rather than machines when their jobs are well structured and well managed (Wood, 2018, p. 51). Employees who believe that the firm owns them put forth their best effort when they are provided chances for job enrichment. The job enrichment approach has a significant impact on employee performance (Saleem et al., 2012). Thus, this projected hypothesis is as follows:

H3. Job enrichment positively affects adaptive performance.

3.7 Job enlargement

The broadening of career options for organizational employees was a major focus of the job enlargement component. In today's workplace, employees want a job that offers a wide variety of tasks and responsibilities to help them grow professionally and succeed in their careers. As a consequence, increasing the number of jobs is considered helpful in terms of inspiring employees to work harder toward the organization's objectives (Tumi et al., 2021). Enlarging the scope of a person's employment entails adding new tasks and responsibilities. The main assumption of work expansion is that increasing the diversity of duties done will alleviate fatigue and boredom, as well as stimulate individuals to perform at higher levels (Hadidi and Abzakh, 2021).

When employees are empowered, they need to be given greater authority and duties, which means that more work

needs to be done on the shop floor (Farah et al., 2018). Saleem and colleagues (2012) described employees in ringed jobs being given more responsibility throughout their workdays as job expansion. However, this does not indicate that employees will be able to expand their responsibilities beyond what they are capable of now. By learning new tasks, employees will be able to improve their talents and obligations, which will allow them to take on more responsibilities and duties in the future.

3.8 Job enlargement and adaptive performance

It's been shown in several studies that expanding the scope of workers' work allowed them to better use their skills and abilities in more challenging roles. It gives employees the freedom to plan their workdays and their schedules according to their preferences. Reducing stress at work and inspiring employees to perform well may be aided by this (Tumi et al., 2021). Employees need to be exposed to different types of duties to increase their motivation. Employees that have a sense of ownership in the firm are far more inclined to double their best efforts to achieve organizational goals as a consequence of job creation. Thus, the researchers hypothesized that

H4. Job enlargement positively affects employee adaptive performance

3.9 Employee involvement

The leaders of an organization should make a concerted effort to promote employee engagement by offering visible chances for individuals or groups at all levels of the company to have a greater voice (Prieto et al., 2020). When new ideas are generated, disseminated, and implemented in the workplace by employees, they represent an important source of innovation (Busch-Casler et al., 2020). The engagement of the whole firm's employees in improving the working environment, product quality, equipment productivity, and, finally, the competitiveness of the organization is how employee involvement is described by the industry. Several early studies stressed employee engagement because of its vital role in delivering services and formulating consumer experiences. The relevance of workers, however, has also been highlighted in recent research, stressing the value of employees' awareness of users, along with their knowledge of organizational (work) practices (Mu et al., 2018).

3.10 Employee involvement and adaptive performance

Increased productivity may be attributed to increased employee involvement in both the private and public sectors.

Participation by employees is directly related to performance, which is closely tied to the human capital theory, as stated by the cognitive model. Front-line workers are seen as more knowledgeable about their occupations than managers. By including people in management, these data may be utilized to make better decisions and improve product quality and efficiency. Getting employees involved in the management and having frequent conversations with their co-workers may improve their problem-solving skills and job expertise. Human capital assets, such as knowledge and skills, may provide organizations with a competitive advantage that is difficult to replicate. According to certain empirical studies and meta-analyses, engagement has positive and direct benefits on productivity (Guthrie et al., 2009).

Only a few studies have looked at other dimensions of employee participation that support this important relationship, despite significant advances in this area. It has also not been adequately investigated in the healthcare industry, despite its importance for healthcare organizations. A goal of employee engagement is to increase members' participation in decisions that have an impact on their productivity and well-being (Clew et al., 1995). Therefore, the study hypothesized that

H5. Employee involvement positively affects adaptive performance.

3.11 Transactional leadership as moderator

When compared to transformational leaders, transactional leaders are exclusively concerned with the transactional nature of their connections with their followers, unlike transformational leaders. Contractual agreements and reciprocal advantages form the basis of the relationship between the leader and subordinates (Pichlak, 2021). Expectancy theory (Vroom, 1964) and equity theory are claimed to be the roots of the transactional leadership style. Both theories highlight the importance of task completion and performance-related incentives (Burke et al., 2006). Individuals are more likely to achieve their goals if they believe they will be rewarded fairly and appropriately for their efforts, according to these views. There is evidence to suggest that leaders who follow the principles of transactional leadership may enhance the performance of their teams by setting clear objectives, offering specific instructions, and monitoring progress toward those goals. Using a reward contingency approach, transactional leaders can encourage their teams to meet project objectives since they are skilled at giving performance-based incentives and placing an emphasis on their employees' extrinsic demands and timely job completions. The leaders are also obliged to fix any flaws or errors that they find (either actively or passively) to guarantee that the projects are completed successfully. As a result, transactional

leadership is more likely to lead to desired objectives (Abbas & Ali, 2021). As a result, transactional leaders 1) are reactive rather than proactive, 2) operate within the organization's culture, 3) ensure that people accomplish their objectives *via* a rewards-and-punishment system, and 4) demonstrate the style of management by exception (D'Souza et al., 2022).

With the economic change, transactional leadership has become a prominent leadership style in several organizations (Hossain et al., 2022). To keep control, transactional leaders focus on the process rather than the content and offer their followers concrete rewards for accomplishing a specific objective (Tahir et al., 2014). In transactional leadership, the leader and his or her subordinates agree on what incentives or acknowledgment the subordinate would get for achieving a certain level of performance. When the agreed-upon level of performance is met, awards, acknowledgment, or both are given. Under such leadership, workers would have high expectations of organizational benefits after they have paid their efforts out, increasing the concept of reciprocity (Shoss et al., 2020). The stream of research suggests a positive relationship between transactional leadership and employee outcomes. Furthermore, several studies have shown that transactional leadership has a strong influence on various relationships (Awan et al., 2021). For instance, previous studies have shown that transactional leaders can elevate the effect of front-line employees' behaviors on their performance because they lead by providing concrete directions, specifying clear expectations, and providing instructions on how to complete tasks to achieve desired outcomes (Prasad and Junni, 2016). However, human resource practices and adaptive performance has limited data to show the relationship that could be strengthened in an organization with a transactional leadership style. Figure 1 shows the conceptual model and hence the study posited the following:

H6. Transactional leadership positively moderates the relationship between performance appraisal and employees' adaptive performance.

H7. Transactional leadership positively moderates the relationship between training and employee adaptive performance.

H8. Transactional leadership positively moderates the relationship between job enlargement and employee adaptive performance.

H9. Transactional leadership positively moderates the relationship between job enrichment and employee adaptive performance.

H10. Transactional leadership positively moderates the relationship between employee involvement and employee adaptive performance.

4 Methodology

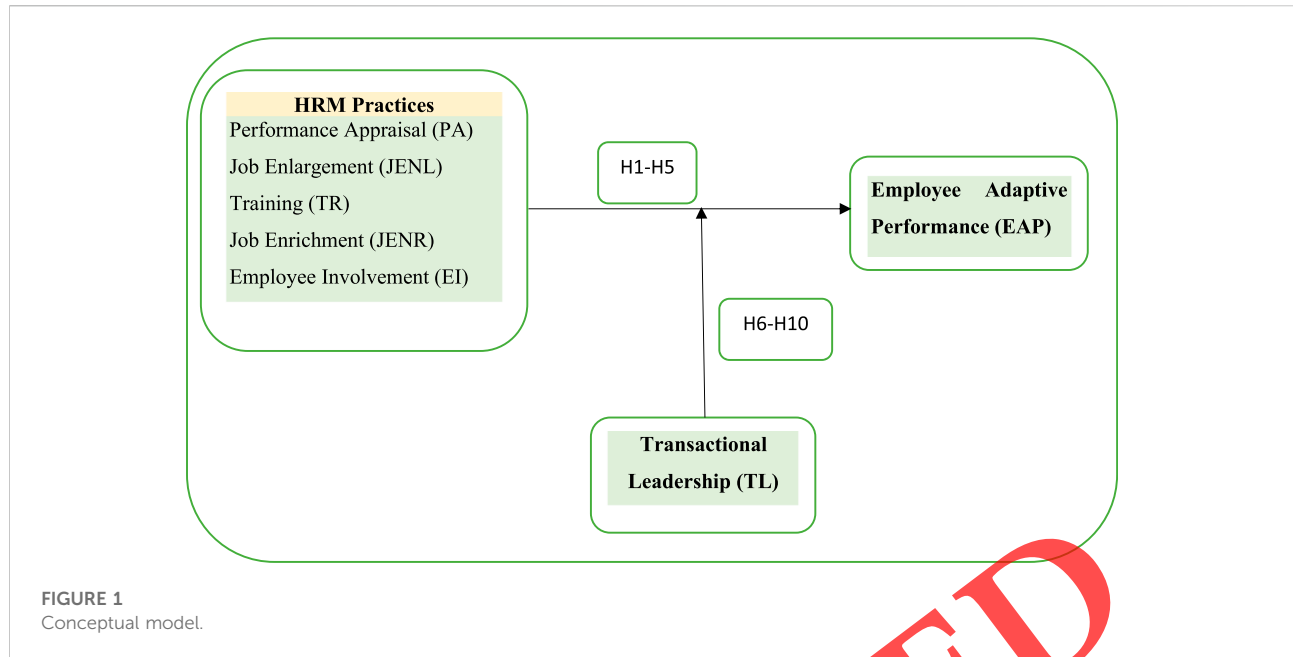
4.1 Data, measurement, and methods

A quantitative survey study was conducted among the employees of the Ministry of Health in the Sultanate of Oman, and a questionnaire was emailed to them. The questionnaire survey was conducted during the COVID-19 era; about 500 emails were sent to the different employees associated with the Ministry of Health, and over a period of 3 months, a total of 233 responses were received. Respondents were informed that the research was only for academic reasons and that all surveys were anonymous and could not be linked to any specific individual to protect their privacy and avoid social desirability bias. Questionnaire items were adopted from past studies. Eight training items were taken from the study by Tahir et al. (2014); seven items of job expansion were adopted from the study by Mwihaki (2017); job enrichment from the sample provided by (Keir and Youssif, 2016); seven items of adaptive performance measures (Pradhan & Jena, 2017). Additionally, a 5-point Likert scale from 1—strongly disagree to 5—strongly agree was used for all the items.

4.2 Preliminary analysis

Before assessing the model, we tested the data for multivariate normality. The skewness coefficient (= 23.535) and kurtosis coefficient (= 98.65766) were both above the threshold values of 2 and 20, suggesting non-normally distributed data, according to Mardia's coefficient approach (Kline, 2011; Byrne, 2013). Therefore, PLS-SEM, which uses a non-parametric inference technique (bootstrapping), is better suited for this task (Sarstedt et al., 2017). Expectation maximization was used to deal with missing values. Using Mahalanobis distance, no outliers were found.

There were 57.1% female respondents and 42.9% male respondents, with the majority of the respondents being under 30 years of age, which is 45%, followed by 30–35 years of age, which is 31.8%, then 36–40 years, which is 11.6%, and the least representation is from 41 to 45 years, which represents only 11.2%. In terms of marital status, 31.8 percent of the people were married and 68.2% were single. Those with five to 10 years of job experience contributed 47.6% of the total, followed by those with fewer than 5 years (35.6%) and those with eleven to 15 years of work experience (16.7%). People having a diploma were more likely to take part in this research than those without one (47.6%), followed by those with a Bachelor's degree (28.3%), then secondary (12.0%), then a Masters degree (10.7%), and those with other backgrounds (1.3%).



4.3 Common method variance

The common method variance (CMV) is recognized for exaggerating the strength of the correlations between the variables in the model since all of the responses come from the same source. You may utilize one of Harman's single factors to identify bias result if any largest variable explained by an individual component was 33.60 percent (Podsakoff et al., 2003). The data demonstrate that CMV is not a danger in the present study.

4.4 Statistical techniques

The research model was analyzed using Smart-PLS 3.3 of the Partial Least Square-Structural Equation Modelling (PLS-SEM) technique. Analytical tools such as PLS-SEM may be used to reduce type II errors and can accommodate formative dimensions as well as a complicated model. Non-parametricity of PLS-SEM allows researchers to relax the requirement for normally distributed data (Hair et al., 2019) and Sarstedt et al. (2017). The technique can also be used to analyze data in studies with small sample sizes and exploratory research. Analysis of multi-item structures with direct and indirect channels is made easier with this tool. Therefore, the measurement and structural model were assessed using the PLS-SEM technique.

4.5 Measurement model

In the measurement models, internal consistency reliability, convergent validity, and discriminant validity were investigated.

Cronbach's Alpha and composite reliability were used to assess the constructs' reliability and rho-A. Table 2 reported the thresholds of Cronbach's Alpha, composite reliability, and rho-A exceeded the 0.70 benchmark (Hair et al., 2017), suggesting adequate consistency among the measures.

Convergent validity was assessed using indicator loadings, composite reliability (CR), and average variance extracted (AVE). In this study, as shown in Figure 2 and Table 1, the convergent validity was achieved as the indicator loadings go beyond the threshold of 0.70, the composite reliability exceeds 0.70, and the AVE is above 0.50 (Hair et al., 2017). To achieve the required convergent validity, two items (AP1 and EI1) were deleted as they fall short of the threshold.

The heterotrait-to-monotrait (HTMT) ratio was used to assess discriminant validity using the thresholds of 0.85 and the Fornell & Larcker criterion (Henseler et al., 2015). Table 2 demonstrates that the correlation among all the factors was below the value of 0.90 (HTMT), and it also shows that diagonal values (bold) are larger than the off-diagonal. These confirmed the evidence of satisfactory discriminant validity. Furthermore, Table 4 shows that all variables reported variance inflation factors (VIFs) less than the benchmark value (Becker et al., 2015; Hair et al., 2017), concluding that there was no multicollinearity concern among the predictor constructs.

4.6 Structural model: Hypotheses testing results

The structural model in this study was assessed using five steps as recommended. First, the variance inflation factor (VIF) was

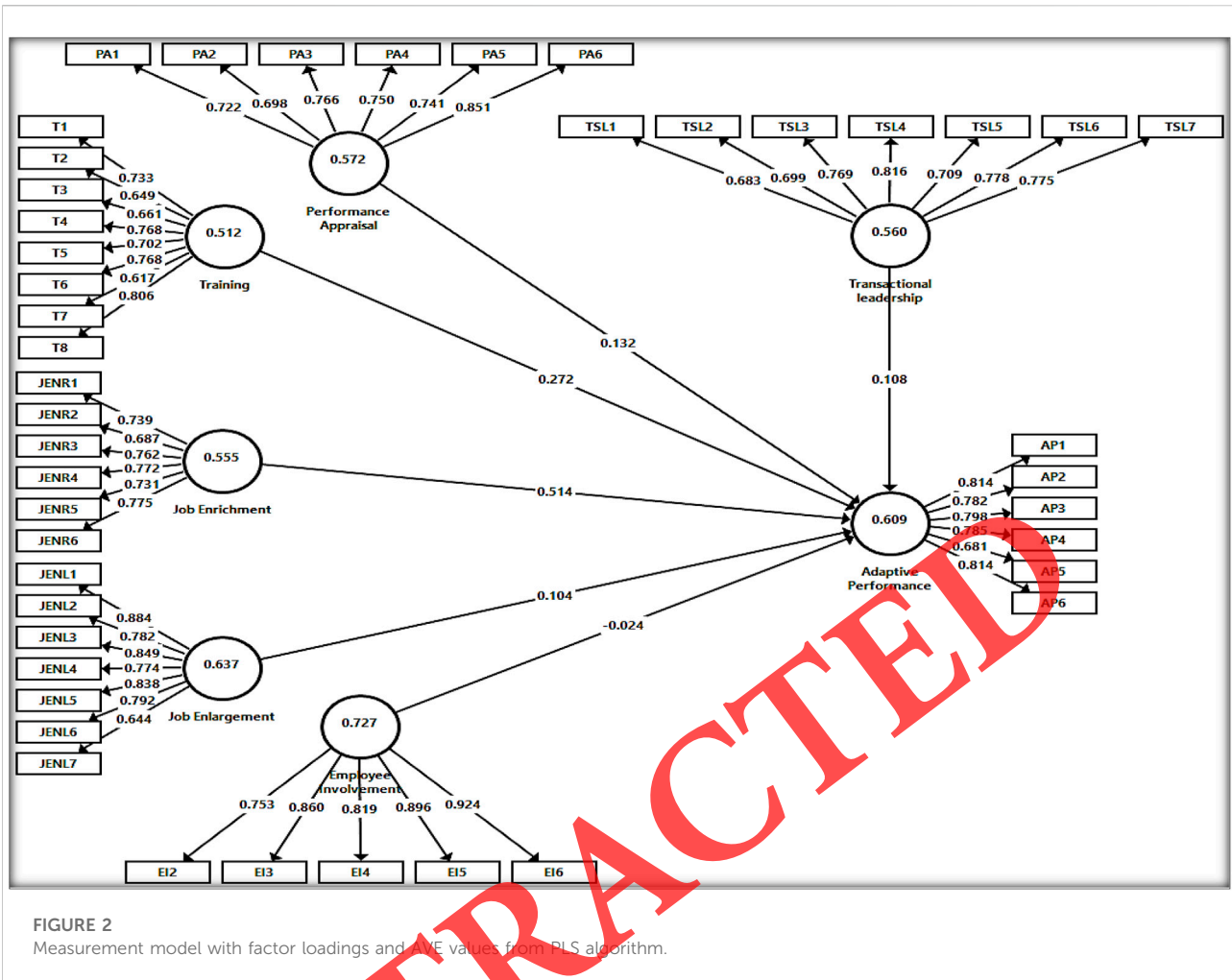


FIGURE 2 Measurement model with factor loadings and AVE values from PLS algorithm.

scrutinized to verify the lateral collinearity issue. Table 3 shows that inner VIF values were less than the cut-off score of 5 (Becker et al., 2015; Hair et al., 2017), indicating that the problem of the multicollinearity issue is not a concern. Second, the importance of parameter estimates in the structural model was assessed using t-values, p-values, and the confidence intervals (95% bias-corrected and accelerated). The hypotheses in the structural model were tested in this study using a bootstrap re-sample technique with 5000 sub-sample iterations. The results of the relationships are presented in Table 3 and Figure 3; performance appraisal, job enlargement, job enrichment, and training have a significant relationship with adaptive performance (H1: $\beta = 0.156, p = 0.045$), (H2: $\beta = 0.105, p = 0.047$), (H3: $\beta = 0.510, p = 0.000$), and (H4: $\beta = 0.302, p = 0.000$), respectively, and therefore, they were all supported. Furthermore, the relationship between employee involvement and adaptive performance was not significant (H4: $\beta = -0.015, p = 0.200$) and, hence, not supported.

The third step included investigating in-sample predictive power (the coefficient of determination, R²). The results revealed

that 56.4% of the variance in adaptive performance was explained by exogenous variables (performance appraisal, job enlargement, job enrichment, training, employee involvement, and transactional leadership) (refer to Table 3).

Fourth, the construct's effect size was calculated using Cohen's f² (Cohen, 1988). Similarly, effect size (f²) values greater than 0.02, 0.15, and 0.35 represent a small, medium, and large effect, respectively (Cohen 1988). Looking at the f² values in Table 3, we can see that all the exogenous variables demonstrated small to medium effect size in generating R² for the endogenous variables.

Fifth, the structural model's prediction accuracy may be evaluated by computing Q² values using a blindfolding technique (Stone, 1974; Geisser, 1975). The endogenous variables (i.e., adaptive performance = 0.328) showed the predictive accurateness of the model (Q² > 0), as shown in Table 3.

The model's predictive accuracy was further investigated by concentrating on "a unique technique for measuring a model's out-of-sample prediction" (PLS predict) (Hair et al., 2019; Shmueli et al., 2019). According to the results of the PLS

TABLE 1 Constructs' validity and reliability.

Constructs	Items	Loadings	CA	CR	AVE
Adaptive performance	AP1	0.814	0.871	0.903	0.609
	AP2	0.782			
	AP3	0.798			
	AP4	0.785			
	AP5	0.681			
	AP6	0.814			
Employee involvement	EI2	0.753	0.904	0.930	0.727
	EI3	0.860			
	EI4	0.819			
	EI5	0.896			
	EI6	0.924			
	Job enlargement	JENL1			
JENL2		0.782			
JENL3		0.849			
JENL4		0.774			
JENL5		0.838			
JENL6		0.792			
JENL7		0.644			
Job enrichment	JENR1	0.739	0.847	0.882	0.555
	JENR2	0.687			
	JENR3	0.762			
	JENR4	0.772			
	JENR5	0.731			
	JENR6	0.775			
Performance appraisal	PA1	0.722	0.850	0.889	0.572
	PA2	0.698			
	PA3	0.766			
	PA4	0.750			
	PA5	0.741			
	PA6	0.851			
Training	T1	0.733	0.875	0.893	0.512
	T2	0.649			
	T3	0.661			
	T4	0.768			
	T5	0.702			
	T6	0.768			
	T7	0.617			
	T8	0.806			
Transactional leadership	TSL1	0.683	0.869	0.899	0.560
	TSL2	0.699			
	TSL3	0.769			
	TSL4	0.816			
	TSL5	0.709			
	TSL6	0.778			
	TSL7	0.775			

Note: F.L = factor loadings; CA = Cronbach's Alpha, CR = construct reliability; AVE = average variance extracted.

predicted evaluation in Table 4, part of the Q^2 value provided by the PLS-SEM estimate is greater than the LM model, indicating that the model's predictive capacity is supported. Following the recommendations outlined by Shmueli et al. (2019), the predictive findings show that several endogenous variables in the PLS model produced a low predictive error when compared to the LM model, suggesting that the model has medium predictive potential. Finally, the researchers used the standardized root mean square residual to evaluate the model fit (SRMR). The composite factor model fits the data in this article since the SRMR is 0.077, which is less than 0.08.

4.7 Moderating analysis

To test H6-H10, the moderation analysis was conducted by taking the interaction effect of transactional leadership into account (see Table 3 and Figure 4). The bootstrap results presented that only one hypothesis was supported, that is, transactional leadership moderates the path between job enrichment and adaptive performance (H8: $\beta = 0.183$, $p = 0.027$), but did not moderate the relationship between the other exogenous variables (performance appraisal, job enlargement, employees' involvement, training, and adaptive performance). Hence, H6, H7, H9, and H10 were not supported. Furthermore, interaction has been graphed to enable important interpretation; hence, Figure 4 shows the plots of the two-way interactions. It illustrates that the linkage between employee involvement and adaptive performance was moderated by transactional leadership.

5 Discussion

Adaptable performance research was investigated in this study and examined the principal aspects of adaptive performance on an individual level. The study also explored the interaction effect of transactional leadership on the connection between HR practices and adaptive performance. The study has introduced transactional leadership as a mediator for better understanding of how HR practices and adaptive performance are linked. According to studies and HR practices, successful HR practices may influence individual behavior (DeNisi and Smith, 2014). Adaptive performance was shown to be positively linked to performance evaluation, job expansion, work enrichment, and training in the present study. This study corroborated the previous findings; even though the association between job enrichment and adaptive performance was shown to be significant, transactional leadership enhanced the performance of the employees.

However, transactional leadership, on the other hand, does not affect the link between job enlargement, employee involvement, training, performance appraisal, and adaptive performance.

This research found that companies should invest in their employees to strengthen their human resources and acquire a competitive edge. Human resources are also evaluated, to identify training needs and ways to boost employee performance (Lira, 2015). To get the greatest performance out of their staff, companies utilize 1) tools for performance evaluation and personnel assessment. For employees to be recognized and rewarded, their work must be evaluated (Levy et al., 2015). Performance evaluations that make employees happy are more likely to get them involved in learning activities, which may help them enhance their skills (Nikpeyma et al., 2013). 2) Employee training as a way of enhancing their abilities, competence, and

TABLE 2 Discriminant validity: Fornell & Larcker.

Constructs	1	2	3	4	5	6	7
1 Adaptive performance	0.781						
2 Employee involvement	0.466	0.852					
3 Job enlargement	0.489	0.441	0.798				
4 Job enrichment	0.698	0.624	0.562	0.745			
5 Performance appraisal	0.495	0.477	0.404	0.536	0.756		
6 Training	0.553	0.41	0.392	0.494	0.433	0.716	
7 Leadership	0.473	0.482	0.501	0.604	0.568	0.567	0.748

HTMT

Constructs	1	2	3	4	5	6	7
1 Adaptive performance							
2 Employee involvement	0.523						
3 Job enlargement	0.545	0.482					
4 Job enrichment	0.730	0.718	0.636				
5 Performance appraisal	0.566	0.530	0.458	0.619			
6 Training	0.508	0.413	0.412	0.493	0.466		
7 Transactional leadership	0.534	0.542	0.572	0.705	0.654	0.634	

TABLE 3 Proposed hypothesis testing results.

Relationships	Std. beta	t-values	p-values	Confidence intervals		Inner VIF	R ²	F ²	Q ²	Decision
				LLCI	ULCI					
H1: PA-> AP	0.156	2.059	0.045	0.089	0.249	1.678	0.464	0.024	0.328	Supported
H2: JENL -> AP	0.105	1.988	0.047	0.014	0.193	1.580		0.016		Supported
H3: JENR -> AP	0.511	7.088	0.000	0.367	0.619	2.330		0.260		Supported
H4: TR -> AP	0.302	4.558	0.000	0.179	0.421	1.588		0.107		Supported
H5: EI -> AP	-0.015	0.200	0.842	-0.197	0.093	1.759		0.001		Not supported
H6: PA*TL -> AP	-0.045	0.500	0.619	-0.246	0.097					Not supported
H7: JEL*TL -> AP	-0.084	1.166	0.249	-0.286	0.012					Not supported
H8: JER*TL -> AP	0.183	2.285	0.027	0.054	0.280					Supported
H9: TR*TL -> AP	-0.060	0.685	0.496	-0.170	0.095					Not supported
H10: EI*TL -> AP	-0.054	0.920	0.362	-0.173	-0.007					Not supported

Note: AP, adaptive performance; PA, performance appraisal; JENL, job enlargement; JENR, job enrichment; TR, training; EI, employee involvement; TL, transactional leadership.

understanding of their work, resulting in increased flexibility. 3) Employees who have more control over their workdays and their duties have a more fulfilling experience at their jobs. Work-related family problems may be reduced and job performance improved by giving employees more control over their schedules.

According to the notion of work enrichment, a job that is “enriched” fosters high levels of three psychological states: knowledge, significance, and obligation. Employees have gained a greater sense of purpose and duty as a consequence of this discovery. 4) The component of job enlargement focuses

TABLE 4 Results of PLS predict.

	PLS			LM			PLS-LM		
	RMSE	MAE	Q ² _predict	RMSE	MAE	Q ² _predict	RMSE	MAE	Q ² _predict
AP1	0.863	0.648	0.367	0.901	0.686	0.308	-0.038	-0.038	0.059
AP2	0.000	0.000	1.000	0.873	0.682	0.397	-0.873	-0.682	0.603
AP3	0.807	0.605	0.420	0.922	0.701	0.243	-0.115	-0.096	0.177
AP4	0.842	0.606	0.351	0.901	0.702	0.256	-0.059	-0.096	0.095
AP5	0.000	0.000	1.000	0.860	0.678	0.320	-0.860	-0.678	0.680
AP6	0.773	0.561	0.426	0.844	0.638	0.316	-0.071	-0.077	0.110

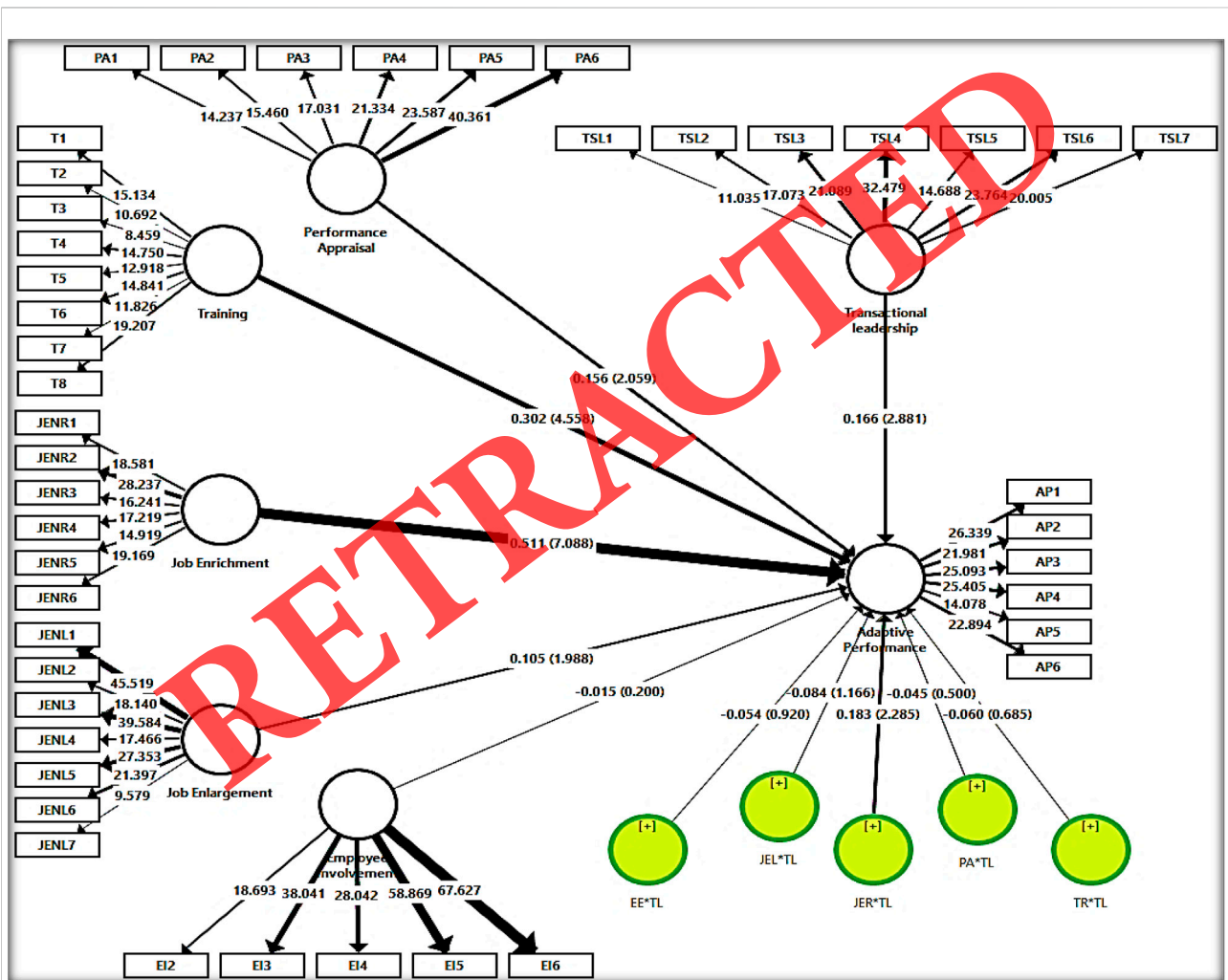


FIGURE 3 Structural model with the path coefficient and t-values from the bootstrapping test.

on the scope of professional obligations offered to workers of organizations. In today’s workplace, employees want a job that offers a wide variety of tasks and responsibilities to help them

grow professionally and succeed in their careers. Employees are more likely to be inspired to work harder and accomplish their goals when their job responsibilities are broadened.

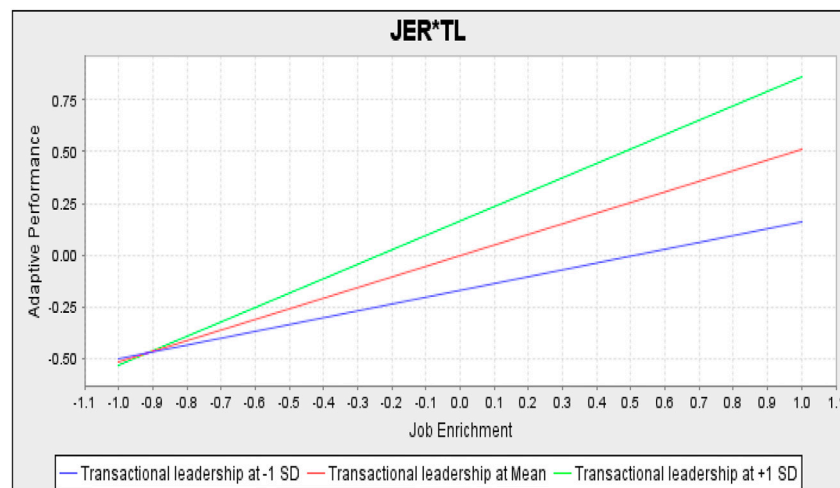


FIGURE 4
Moderation graph.

5.1 Theoretical implications

Worker success in an ever-changing environment may be measured in part by how flexible they are in their job role performance, and that is the topic of this study. An organization's long-term efficiency and success may be greatly predicted by its ability to adapt to a changing environment as well as by its employees' ability to perform well on individual tasks and in context (Dai, et al., 2021). Adaptive performance is influenced by a person's skills and psychological traits of emotional stability, ambition, and the Big Five (Kang et al., 2021). Nonetheless, this study focuses on the elements of employees' jobs and explores the influence of the transactional leadership style on the connection between HR practices and employee adaptive performance.

5.2 Managerial implications

HR practitioners' work is influenced by the formation and resuscitation of individual knowledge and organizational efficiency; hence, adaptive performance is critical to their professionalization (Waight and Greer, 2021). As a consequence, the findings of this research have many important implications for practitioners. In terms of application, our findings imply that firms may reap significant (but distinct) advantages by investing in various aspects of HR processes. HRM practices (job extension, job enrichment, training, and performance assessment) have a considerable and favorable influence on the adaptive performance of employees, according to this research, showing that HRM practices are also major determinants of employees' adaptive performance. In addition, the

results contribute to our knowledge of organizational drivers of adaptive performance beyond individual aspects like personality, cognitive ability, and so on, implying that organizations may increase their employees' adaptive performance by employing HRM practices that foster adaptive performance. Health ministry management and other government agencies will benefit from the findings of this study since it shows that HRM practices are important to consider in encouraging more adaptable performance.

6 Conclusion

Researchers have identified a range of methods for boosting contextual and task performance, but employees' adaptability has yet to be investigated. The current research adds to the body of knowledge by presenting human resource practices as a new paradigm for boosting employees' flexible performance. HR practices are a solution for many altering demands, according to the study's findings, including a source of adaptive performance. Furthermore, this study uncovered new evidence about the importance of encouraging transactional leadership in organizations that are going through transformation. Transactional leadership, according to the findings, benefits not just individuals by boosting workplace success but also businesses by improving employee performance.

First, this study expands on the antecedents of adaptive performance by including HR practices in the equation. Adaptive performance, on the other hand, is affected by a wide range of factors, including both individual and organizational traits, as previously stated. To deliver adaptive performance, a combination of personal characteristics and

work environment/group/organizational factors is most probable (Park and Park, 2019). The research that is currently available does not account for all of the possible factors. There has to be a greater focus on how to impact employee adaptive performance by matching the organization's environment to employees' needs and traits, as well as how to influence their adaptive performance. Second, data are collected from a single source, increasing the risk of bias due to a shared methodology; it is recommended to collect the data from more than one source. Last, more studies are required to shed light on the contextual factors that influence adaptive performance. The work environment, for example, may restrict the positive impact of HR policies on performance if employees are not provided with the necessary equipment and goals to perform properly. More study is required to identify potential moderators or mediators of HR practices' impact on adaptive performance.

Data availability statement

The raw data supporting the conclusion of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent

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from the [patients/ participants OR patients/participants legal guardian/next of kin] was not required to participate in this study in accordance with the national legislation and the institutional requirements.

Author contributions

Conceptualization and original data drafting: IA. Methodology design: RS. Methodology validation: SA. Data collection: IA. Data processing and analysis: IA and HA-E. Draft writing: IA. Draft revision and editing: MC.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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