

Navigating Turbulence in the Pharmaceutical Industry: Understanding the Psychological Contract Breach through JD-R Framework and Its Impact on Turnover Intention

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ABSTRACT

The research aims to explain the impact of psychological contract breach on employees in foreign-owned pharmaceutical companies in Indonesia, with a focus on the turbulent conditions within the pharmaceutical industry due to digitalization. To achieve this objective, a deductive logical hypothetical causal study method was employed, involving a sample of 487 employees in foreign-owned pharmaceutical companies in Indonesia. Data analysis was conducted using Structural Equation Modeling (SEM). The study's findings are discussed based on two key theories, namely, the theory of learned helplessness and the Job Demands-Resources (JD-R) theory, to analyze the effects of psychological contract breaches and gain a deeper understanding of how such breaches affect the mental health and motivation of employees. The research results provide valuable insights for addressing issues arising from disruptions in the pharmaceutical industry and contribute to the understanding of employee well-being and turnover amidst changing conditions.

Keywords: Psychological Contract Breach, Job Stress, Engagement, Turnover, JD-R

INTRODUCTION

Post-COVID-19, digitalization is rapidly advancing and has significantly altered many aspects of how organizations operate, particularly in human resource management (HRM). There are new expectations regarding support and resources for employees to cope with these changes, and organizations hold different expectations for their employees (Karani et al., 2023). AL-Abrow et al. (2019) point out that organizations often fail to meet employee demands due to various changes, such as competition and HRM restructuring. This condition has the potential to lead to Psychological Contract Breach (PBC). In the context of the pharmaceutical industry, digitalization and the expiration of drug patents have created instability within the sector, disrupting HRM functions and potentially leading to PBC. Factors like digitalization, patent expiration, and insufficient investment in employees can have an impact on psychological contract violations, which, in turn, can cause instability in the industry. Digitalization enables pharmaceutical companies to enhance efficiency in research and development, clinical trials, manufacturing, and drug distribution. However, these technological changes can also affect employees who must adapt to new technologies, including the threat of layoffs. This can create feelings of uncertainty and anxiety among new employees. This often occurs because new employees frequently have overly optimistic expectations about their jobs and the company, which often do not align with reality after some time has passed (Karani et al., 2023).

Psychological Contract Breach (PCB) is a phenomenon where there is a breach of the psychological contract experienced by newcomers in the organization. This breach occurs during the early socialization period when new employees first join the organization (H. Li et al., 2022). de Chatillon et al., (2023) explain that PCB can result in negative feelings, attitudes, and behaviors of employees. PCB negatively impacts employees, such as causing job stress and reducing employee engagement, as proposed by Arunachalam, (2021) and Ishtiaq & Zeb, (2020). PCB leads to turnover intention among talented employees within the organization (Abdalla et al., 2021; Shao et al., 2022). However, turnover intention, as an outcome of increased job demands and decreased resources, is crucial in the pharmaceutical industry, including in Indonesia as one of the emerging markets worldwide (Kisahwan & Gunawan, 2020). Kerdipitak & Jermisittiparsert, (2020) reveal the negative impact of

high turnover on pharmaceutical company productivity. Ninroon et al., (2020) indicate the complexity of turnover issues in the pharmaceutical industry. Understanding specific factors influencing turnover, including the consequences of PCB, is essential. AL-Abrow et al. (2019) suggest that PCB (Psychological Contract Breach) arises when management fails in carrying out its responsibilities, leading to issues in the form of undesirable organizational behaviors.

The mechanisms to reduce Psychological Contract Breach are not fully understood at the individual level. Psychological therapy can assist employees in coping with feelings of helplessness and regaining control over their challenging and costly lives. PCB in the context of employment relationships requires further study (He et al., 2023). Changes have occurred in the nature of psychological contracts in PCB, including ambiguity and perception gaps, definitions, and the impact of PCB on employees (Suazo, 2009). Li et al., (2022) have paid limited attention to PCB. Understanding the importance of comprehending the health impairment process and motivation in the work process from the JD-R perspective is necessary. Psychological contract breach is a condition that disrupts employees' mental health and requires resources to overcome it. The contribution of this research is to integrate two different psychological perspectives, namely, the theory of learned helplessness and the Job Demands-Resources (JD-R) theory in understanding the impact of psychological contract breach. This provides a more comprehensive understanding of how psychological contract breaches can affect two crucial processes in employment that ultimately influence turnover.

The primary objective of the research is to explore how the breach of psychological contracts affects employees within pharmaceutical companies in Indonesia that are owned by foreign entities, with a specific emphasis on the tumultuous environment caused by the adoption of digitalization

LITERATURE REVIEW

Psychological Contract Breach, Job Stress, and Work Engagement

PBC represents the misalignment between what an organization has promised and what it actually delivers to its employees (de Chatillon et al., 2023; He et al., 2023; Suazo, 2009). Contract violations can occur at the individual level with superiors, at the organizational level as a whole, and are related to the job itself (de Chatillon et al., 2023). PCB leads to high levels of stress among employees, ultimately reducing employee engagement in their work. PBC results in stress (Achnak et al., 2021; Coyle-Shapiro et al., 2022; Duran et al., 2019; Mehta et al., 2023; Shin, 2019). Griep et al., (2021) revealed that PC breach increases complaints about the mental and physical health of employees. Arunachalam, (2021); Ishtiaq & Zeb, (2020) explain PCB as a stress trigger that affects engagement. Employees who feel that their psychological contract has been breached are burdened by uncertainty and feelings of injustice, which, in turn, can disrupt their engagement in their work. Ampofo, 2021; Rayton & Yalabik, (2014) confirm that PBC reduces psychological capital and decreases life satisfaction and work engagement. Work engagement, as viewed from the Job Demands-Resources (JDR) perspective, is a process in which there is high motivation and low health impairment. Bakker & Leiter, (2010); Schaufeli & Bakker, (2004) define work engagement as a state in which an individual has a positive mindset, enabling them to express themselves physically, cognitively, and affectively in their work. The three components of work engagement are physical, emotional, and cognitive, (Mazzetti et al, 2023; Han et al., 2021; Soares & Mosquera, 2019; Trógolo et al., 2020). (A. B. Bakker & Demerouti, 2008) explain that the main drivers in work are job resources and personal resources. A decrease in personal resources due to stress and PCB leads to a decrease in work engagement. Work engagement represents an individual's mental representation of their job and the environment that accompanies it (Costa et al., 2016).

Hypotheses Presented:

Ha1: Psychological contract breach has a positive effect on job stress.

Ha2: Psychological contract breach has a negative effect on work engagement.

Ha3: Job stress mediates the relationship between psychological contract breach and work engagement.

Psychological Contract Breach, Work Engagement and Turnover Intention

Psychological contract breach can reduce engagement, which, in turn, can increase turnover intention (Chiu et al., 2020). This aligns with the JD-R concept, which describes how job demands and job resources play a role in influencing employee well-being and behavior in the workplace. PCB, as a job demand, reduces job resources both organizationally and personally. Saleem et al., (2021); Sandhya & Sulphey, (2020); Sharma et al., (2022), as well as Bal et al., (2013), reveal that psychological contract fulfillment impacts well-being and turnover, and this is especially relevant when PCB occurs. PCB diminishes well-being, as evidenced by an increase in the health impairment process and a decrease in the motivational process in individuals. Both of these processes are indicative of reduced work engagement. Work engagement, as a result of PCB, makes employees feel less attached to the organization and more inclined to consider changing jobs. PBC reduces engagement and increases turnover intention (Azeem et al., 2020; Karatepe et al., 2021). Work engagement, as a reaction to PCB perceived by employees, affects the intention to change jobs.

The proposed hypothesis is as follows:

Ha4: Work engagement mediates the impact of PCB on turnover intention.

Job Stress, Work Engagement and Turnover Intention

Job stress leads to decreased engagement and turnover intention. Job stress is detrimental tension that arises in the work context and can have negative impacts on various aspects of employees' lives and well-being (Akgunduz et al., 2023). Job stress increases turnover intention (Chen & Qi, 2022; Dodanwala et al., 2022; Lai et al., 2022; Salama et al., 2022). Decreased personal resources lead to increased health impairment processes and, at the same time, decreased motivation, resulting in low work engagement. One of the determinants of work engagement is personal resources (A. B. Bakker & Demerouti, 2008; Lee et al., 2018; Schaufeli & Bakker, 2004). Job stress reduces personal resources to cope with stressful conditions and simultaneously increases health impairment processes, leading to reduced work engagement.

Turnover intention is the perceived likelihood of permanently leaving the employing organization in the near future (Gebregziabher et al., 2020; Ibrahim Alzamel et al., 2020; N. Li et al., 2019). Turnover occurs due to decreased motivation resulting from high job pressure. Turnover intention is an expression of the motivation to turnover and is the best predictor of turnover (Fu et al., 2022). Turnover intention arises from decreased resources and increased job pressure. Simultaneously, initial indications can be seen from the decreased engagement of employees due to high job stress.

The proposed hypotheses are as follows:

Ha5: Job stress has a negative impact on work engagement.

Ha6: Work engagement has a negative impact on turnover intention.

Ha7: Work engagement mediates the impact of job stress on turnover intention.

Proposes Model

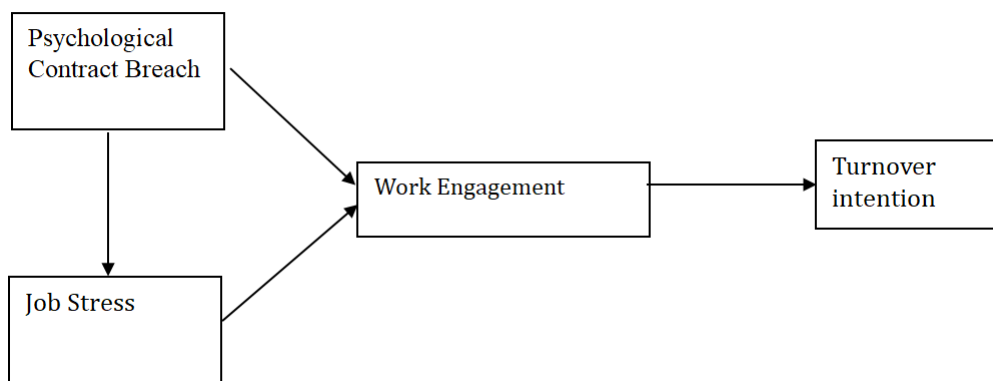


Figure 1. Proposed Model

RESEARCH METHOD

In this study, we developed a deductive logical hypothetical causal study method to investigate the impact of psychological contract breach on employees in foreign pharmaceutical companies (PMA) in Indonesia, following the approach by Sekaran & Bougie, (2016). We selected a research sample consisting of 487 employees working in various foreign pharmaceutical companies in Indonesia. The sample selection was done carefully to ensure representativeness and adequate industry variation, using simple random sampling after determining the proportional representation of each employee in the companies.

The measurement of research variables based on psychological contract breach was developed following Suazo, (2009), which includes the following indicators: 1) Almost all the promises made by my employer during recruitment have been kept so far. 2) I feel that my employer has come through in fulfilling the promises made to me when I was hired. The indicators used were highly adequate, with a good Goodness of Fit (GOF) score, including CMIN/DF = 1.86, GFI = 0.91, CFI = 0.96, PNFI = 0.78, RMSEA = 0.041, and SRMR = 0.02.

Job stress was measured based on Salama et al., (2022), consisting of 14 statements. The indicators used were highly adequate, with a good Goodness of Fit (GOF) score, including CMIN/DF = 1.72, GFI = 0.92, CFI = 0.97, PNFI = 0.76, RMSEA = 0.061, and SRMR = 0.042.

Engagement was measured using the Utrecht Work Engagement Scale (UWES), which has been widely validated on multiple occasions (Bakker et al., 2018; Costa et al., 2016). The indicators used were highly adequate, with a good Goodness of Fit (GOF) score, including CMIN/DF = 1.63, GFI = 0.91, CFI = 0.96, PNFI = 0.80, RMSEA = 0.031, and SRMR = 0.002.

Turnover intention was developed based on Chen & Qi, (2022); Kisahwan & Gunawan, (2020), indicating turnover intention through active job searching and frequent thoughts of leaving the current job. The indicators used were highly adequate, with a good Goodness of Fit (GOF) score, including CMIN/DF = 1.99,

GFI = 0.90, CFI = 0.94, PNFI = 0.78, RMSEA = 0.041, and SRMR = 0.01.

Data were collected by distributing questionnaires to the employee sample in foreign pharmaceutical companies (PMA) in Indonesia. We ensured that the data collection process was conducted ethically and obtained permission from the relevant companies. Control variables in this study included: 1) Tenure, indicating how long an individual has been working in the organization, used to control the influence of this variable on the perception of Psychological Contract Breach (PCB). 2) Gender, included in the analysis to account for potential gender-related differences in PCB perceptions, as per Suazo, (2009). 3) Marital status, specifying whether an individual is married or not, a widower with children or without children, a widow with children or without children.

Data analysis was conducted using the Structural Equation Modeling (SEM) method, a powerful statistical tool for testing and modeling relationships between variables. In this study, SEM was used to test the causal relationships between the identified variables. The chosen method was maximum likelihood estimation. Once the assumptions based on MLI were met, model and hypothesis testing were performed.

RESULT

The description of the research variables is as follows:

Table 1. Description statistic

Variable	Mean	Standard Deviation	Category
Psychological Contract Breach	3.3	0.66	
Job stress	3.6	0.82	
Work Engagement	3.5	0.61	
Turnover intention	2.2	0.41	

Source: Data processing (2023)

Results of the model test:

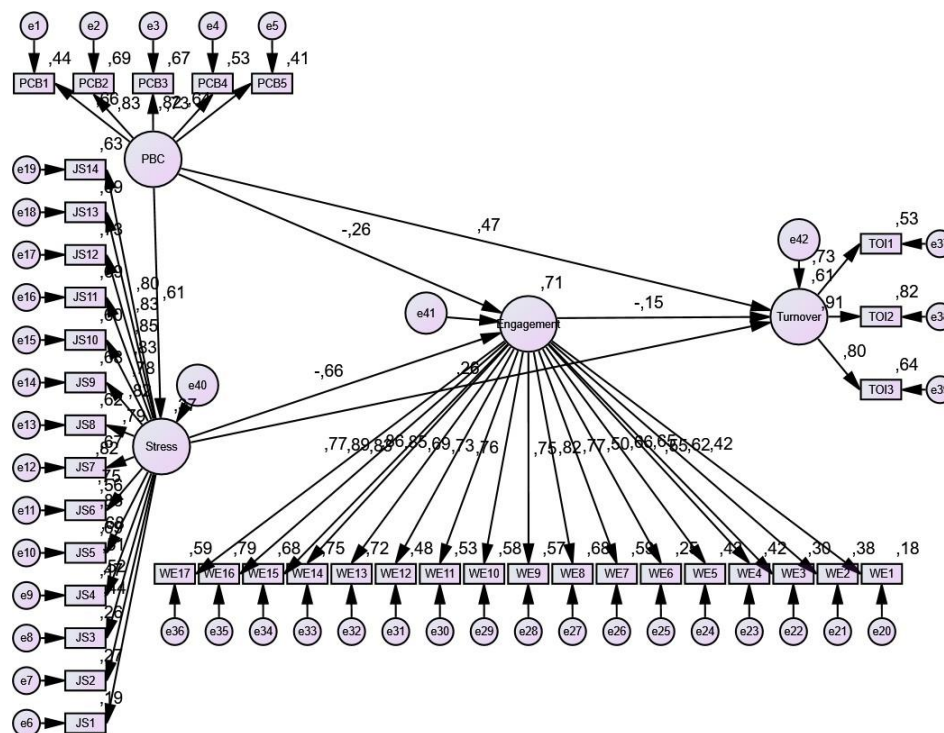


Figure 2. Results of the research model test: Standardized regression weights.

The test results indicate that each factor weight is accepted, and the relationships between the constructed variables in the study show the importance of organizational resources such as distributive leadership. Performance success is based on motivational processes and health impairment processes. The AVE, composite reliability, and discriminant validity test results are as follows:

Table 2. The test results for AVE, composite reliability, and discriminant validity

Variables	AVE	Composite Reliability	1	2	3	4
Psychological Contract Breach	0.549	0.828	0.549			
Job Stress	0.553	0.937	0.027	0.553		
Work Engagement	0.525	0.9361	0.038	0.029	0.525	
Turnover Intention	0.663	0.863	0.085	0.036	0.044	0.663

Based on the test results, the Average Variance Extracted (AVE) values are as follows: Psychological contract breach has an AVE value of 54.9%, Job stress has an AVE of 55.3%. Work Engagement can be explained by its indicators at 52.5%, and Turnover intention has an AVE of 66.3%. These results indicate that the constructs used in measuring psychological contract breach, job stress, work engagement, and turnover intention have reasonably good levels of validity, although there are slight differences in the validity levels among these constructs. Adequate validity suggests that these measurements can be relied upon to evaluate the identification characteristics in election organizers.

The discriminant validity test results show that observed variables for each latent variable can distinguish between different constructs, and there is no mixing of indicators from different constructs in the measurement of observed variables. For instance, the correlation coefficient between observed variables on the psychological contract breach latent variable has a higher correlation of 0.549 compared to other latent variables such as job stress (0.027), work engagement (0.038), and turnover intention (0.085). The observed variables of Job stress have a higher correlation (0.553) with their respective latent variable compared to observed variables from other latent variables. Each can effectively distinguish latent variables. Discriminant validity is supported.

The normality test results using the Kolmogorov-Smirnov method with a 95% confidence level indicate that our data follows a normal distribution. This is demonstrated by the P-Value of 0.625, which is greater than 0.05. There were no issues with model identification using the chosen tool. Assumptions regarding multicollinearity (strong relationships between predictors) and singularity (problems with linear dependency) were met. In the multivariate extreme data test, with a significance level (p) less than 0.001, the results show that the Mahalanobis D-squared value in the AMOS calculation is lower than the chi-square value at the 0.001 significance level. This indicates the absence of multivariate outliers in the data.

Next is the goodness-of-fit model test with the following results:

Table 3. Model test results

GOF Parameters	Stage First test	Respecification	Cur of value	Conclusion
Absolute fit measure				
p-value (Sig.)	0.000	0.00	≥ 0,05	Moderate
CMIN	2.423	1.921	≤ 2,00	Fit
GFI (Goodness of Fit)	0.749	0.912	≥ 0,9	Fit
RMSEA (Root Mean square Error of Approximation)	0.081	0.044	0.08	Fit
Incremental fit measure				
AGFI (Adjusted Goodness of Fit Index)	0.749	0.911	≥ 0,90	Fit
CFI (Comparative Fit Index)	0.903	0.961	≥ 0,95	Fit
Incremental Fit Index (IFI)	0.904	0.973	≥ 0,95	Fit
Relative Fit Index (RFI)	0.826	0.962	≥ 0,95	Fit
Parsimonious fit measure				
PNFI (Parsimonious Normed Fit Index)	0.736	0.782	0.6	Fit
PGFI (Parsimonious Goodness of Fit Index)	0.649	0.662	Mendekati 1	Moderate

Source: Data processing (2022)

According to the test results, it can be concluded that the criteria for goodness of fit, including absolute fit indices, incremental fit indices, and parsimony indices, have been satisfied after model adjustments. The field data aligns with the research model's construction. Furthermore, the hypothesis testing is based on the data analysis results, yielding the following outcomes:

Table 4. Causality test results regression weight

Path			Estimate	S.E.	C.R.	P	Standardized regression weight
Stress	<---	PBC	0.434	0.055	7,854	***	0.611
Engagement	<---	PBC	-0.202	0.038	-5,329	***	-0.258
Engagement	<---	Stress	-0.728	0.108	-6,769	***	-0.66
Turnover	<---	PBC	0.505	0.066	7,672	***	0.473
Turnover	<---	Stress	0.385	0.107	3,590	***	0.256
Turnover	<---	Engagement	-0.2	0.098	-2,034	0.042	-0.147

Source: Regression weight Data processing (2023)

The test results indicate that the relationships between variables are mostly significant, except for the relationship between Psychological Contract Breach and performance. This is in line with the Critical Ratio values falling within the two-tailed hypothesis acceptance region, which is >1.95 and <1.95 . A P-value < 0.05 demonstrates the significance of each variable relationship. Furthermore, the next step involves testing mediating variables, as can be seen in the following table:

Table 5. Mediation Test Results

Path					Estimate
Engagement	<---	Job Stress	<---	PBC	-0.403
Turnover	<---	Engagement	<---	PBC	0.254
Turnover	<---	Engagement	<---	Job Stress	0.097

Source: Data Processing Results Using SEM

The next step is to test the hypotheses

Tabel 6. The hypothesis test results Standardized regression weight

Hypothesis	Estimate	Conclusion of Hypothesis Testing
Psychological contract breach has a positive effect on job stress	0.611	Supported
Psychological contract breach has a negative effect on work engagement	-0.258	Supported
Job stress mediates the relationship between psychological contract breach and work engagement	-0.403	Supported
Work engagement mediates the impact of PCB on turnover intention	0.254	Supported
Job stress has a negative impact on work engagement	-0.66	Supported
Work engagement has a negative impact on turnover intention	-0.147	Supported
Work engagement mediates the impact of job stress on turnover intention	0.097	Supported

Source: Standardized Regression Weight Data Analysis 2023

The study's results indicate that hypotheses ha1, ha2, ha3, h4, h5, h6, h7 are supported, consistent with previous research. The difference in this study is that the position of PCB demands and job stress reduces the availability of organizational and personal resources needed to keep health impairment processes low and motivation high to maintain employee engagement required to support organizational performance. Engagement has an impact on turnover intention in the low category. However, this serves as a strong signal for HR functions to implement structured efforts to address the increasing turnover intention, which has the potential to become actual turnover, especially among talented employees.

DISCUSSION

The impact of PCB on psychological contract breach, job stress, work engagement, and turnover intention cannot be ignored, especially among talented employees in the company. The high PCB as a job demand and the depletion of employees' personal resources have a negative impact on their long-term ability to cope with job demands. The negative impact perceived by employees serves as a strong signal for the company to make improvements in PCB.

Integrating JD-R with the Learned Helplessness theory helps HR functions address the impact of PCB on job stress, engagement, and turnover. Decision-making based on the identification of PCB as a job demand contributing to stress becomes more effective and argumentative. Strategies to reduce the impact of PCB include ensuring the availability of job resources needed to address PCB, both organizational resources (short-term) and individual resources to ensure long-term mental health. Support, training, and recognition of employees are provided to enhance work engagement and restore control over their work, including trust in the institution. Low PCB and effective communication help reduce employee stress and increase work engagement (Arunachalam, 2021). Companies encourage employee participation in decision-making and give employees more control over tasks and work environments based on lessons learned about employees' helplessness in dealing with PCB and stress.

Consistent with Mehta et al., (2023), which reveals learned helplessness as a psychological condition in which employees feel they cannot change or control the occurrence of PCB and job stress, even if they have the ability to do so. Companies can optimize HR functions to provide resources and enhance personal resource availability to improve work engagement and reduce turnover intention. Without an understanding of the psychological condition resulting from PCB, where employees feel helpless, they tend to have a negative view of themselves and their future within the company. Employees feel incapable of overcoming challenges, which, in turn, can reduce engagement and lead them to choose turnover as the primary option to mitigate the negative impact of PCB on mental health. More effective strategies to help employees experiencing learned helplessness involve resource support, psychological support, education, training, and skill development to address challenges and regain control over their lives. Through a holistic approach that

integrates JD-R and the Learned Helplessness theory, organizations can more effectively address PCB, reduce job stress, enhance work engagement, and reduce high turnover intentions.

LIMITATIONS

The research is limited to the pharmaceutical industry with a sample of employees holding the status of Medical Representatives (MR). This limitation suggests that more accurate findings may be found in other sectors. Future research should consider companies from different sectors with samples at different levels. Exploration of factors such as firm size and distinctions between foreign direct investment (FDI) and domestic investment (DI) ownership could be beneficial. Data collection in this study is solely based on employees' perceptions. Data sources from companies could be considered in further research to depict PCB from the perspective of the companies, as represented by structural officials. Subsequent studies may explore different methods, such as qualitative approaches, to gain insights into the impact of PCB in different situations during the COVID-19 era, where the healthcare system is currently undergoing improvements and changes to become stronger.

CONCLUSION

PCB and job stress contribute to the reduction of organizational and individual resource availability needed to maintain mental health and high levels of work engagement. Work engagement plays a role in reducing turnover intentions among employees. The impact of PCB, job stress, work engagement, and turnover intentions cannot be ignored, especially among talented employees within the company. High levels of PCB and demanding job requirements can reduce employees' long-term ability to cope with job demands.

Theoretical Implication: The integration of Job Demands-Resources (JD-R) and the Learned Helplessness Theory helps HR in addressing the impact of PCB on job stress, engagement, and turnover intentions. Decision-making based on the identification of PCB as a job demand contributing to stress becomes more effective and persuasive. Through a holistic approach that integrates JD-R and the Learned Helplessness Theory, organizations can address PCB, reduce job stress, enhance work engagement, and reduce high turnover intentions.

Practical Implication: Strategies to mitigate the impact of PCB include ensuring the availability of necessary job resources, both from an organizational and individual perspective. Providing support, training, and recognition to employees can enhance work engagement and reduce stress. To reduce turnover rates and prevent turnover intentions from becoming actual behaviors, organizations need to take a series of practical actions based on a deep understanding of the effects of PCB and job stress on employees.

Turnover intentions can undermine employee morale. Identifying both talented and untalented employees who may be vulnerable to high turnover intentions is crucial. Organizations should ensure the availability of necessary job resources and provide psychological support, education, training, and skill development to employees. Encouraging employee participation in decision-making and providing them with control over their tasks and work environment can enhance engagement. Effective communication between management and employees is key, as is an efficient performance management system. It's important to continuously monitor turnover rates, turnover intentions, and employee engagement and involve managers in recognizing signs of stress and learned helplessness in their employees.

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