

The Relationship Between Labor Repair and Labor Absorption in Private Company Employees in Montería, Colombia

Hernán Javier Guzmán Murillo¹, José Marcelo Torres Ortega², William Niebles³

Abstract

The objective of this study is to analyze the relationship between repair capacity and labor absorption in employees of private companies in Montería, Colombia. Organizational repair refers to the ability of employees to adjust and improve their job performance through the identification and correction of errors, while absorption is defined as the state of deep immersion and concentration in job tasks. Through a simple linear regression model, the study quantifies how repair influences absorption levels in a sample of 250 employees from different private companies in Montería. It was found that employees who implement strategies to correct and improve their performance experience higher levels of absorption, which in turn boosts their motivation and productivity. The results suggest that organizational repair acts as a resource that improves work engagement, favoring concentration, fluidity in performance and the general well-being of employees. This study provides empirical evidence on the importance of reparation strategies in the work context and their direct relationship with organizational vigor and performance.

Keywords: *Organizational Repair, Labor Absorption, Labor Commitment, Engagement, Private Companies, Montería, Self-Regulation*

Introduction

Work absorption is a state of engagement in which employees feel completely immersed in their tasks, with high concentration and a sense of fluidity in their performance. This dimension of engagement has been widely studied due to its impact on productivity, job satisfaction, and organizational well-being. However, the factors that enhance labor absorption still require further exploration, especially in the context of private companies in Montería, Colombia. Organizational repair, understood as the ability of employees to adjust their work strategies, correct errors and improve their performance based on the feedback received, is presented as a relevant factor that can influence the level of absorption at work. Employees who implement effective redress mechanisms are expected to experience a greater connection to their work activities, which in turn can improve their performance and commitment to the company.

From a theoretical perspective, the relationship between labor repair and labor absorption can be explained through the Labor Demands and Resources Model (JD-R) by Bakker and Demerouti (2007), which postulates that labor resources act as facilitators of engagement. In this context, repair can be considered a personal resource that allows employees to more effectively manage their work demands, reducing fatigue and promoting immersion in work. Likewise, Schaufeli and Bakker's (2004) Theory of Work Engagement establishes that absorption is one of the fundamental dimensions of engagement and is favored by a work environment that provides opportunities for self-regulation and continuous learning. Repair, being a process of constant adjustment and improvement, allows employees to feel more confident in their functions and reduce uncertainty about their performance, which facilitates concentration and enjoyment of their work activities.

From a neuroscientific perspective, previous studies have shown that repair and self-regulation processes at work are related to the activation of the dorsolateral prefrontal cortex, a region of the brain responsible for planning, impulse control, and attention regulation. In terms of Sweller's (1988) Cognitive Load Model, organizational repair optimizes information management and reduces mental overload, allowing employees

¹ Doctor en Ciencias de la Educación Universidad de Sucre, Email: hernan.guzman@unisucra.edu.co, <https://orcid.org/0000-0002-6757-4549>

² Doctor en Economía y Empresas, Doctor en Estudios Políticos Universidad de Sucre, Email: jose.torres@unisucra.edu.co, <https://orcid.org/0000-0001-8107-8763>

³ Doctor en Ciencias Gerenciales, Universidad de Sucre, Email: williamniebles@yahoo.com.mx, <https://orcid.org/0000-0001-9411-4583>

to direct their attention more efficiently and experience a deeper state of absorption in their work tasks. When workers have clarity on how to improve their performance and have tools to correct errors effectively, they can fully focus on their roles without unnecessary distractions.

Despite the theoretical and practical relevance of the relationship between reparation and absorption, there are few empirical studies that quantify this relationship in the context of private companies in Colombia. The literature on work engagement has extensively explored the influence of organizational resources on employee motivation and performance, but more evidence is needed on how workers' ability to adjust and improve their performance impacts their level of work immersion. This study aims to analyze the impact of repair on the labor absorption of employees of private companies in Montería, using a quantitative approach based on a simple linear regression model. It is hypothesized that greater reparability is associated with higher levels of absorption, implying that employees who implement adjustment and improvement strategies in their work experience greater connection and focus in their work activities.

This study contributes to the literature on labor engagement by providing empirical evidence on the relationship between repair and absorption in the Colombian business context. Their findings can serve as a basis for the design of organizational strategies that promote continuous improvement and self-regulation in the work environment, thus optimizing human talent management. Through the analysis of data obtained from employees of private companies in Montería, it seeks to identify mechanisms that strengthen labor absorption and improve organizational performance in the business sector.

Methodology

This study adopts a quantitative approach with a correlational-explanatory design, whose purpose is to analyze the relationship between repair capacity and labor absorption in employees of private companies in Montería, Colombia. To this end, a simple linear regression model was used to determine the magnitude and direction of the impact of repair capacity on labor absorption. This design allows us to evaluate the extent to which employees' implementation of adjustment and improvement strategies influences their level of immersion at work.

The study population was made up of employees of private companies belonging to various economic sectors in Montería. A sample of 250 employees was selected through a non-probabilistic intentional sampling, considering criteria of accessibility and willingness to participate in the study. The aim was to guarantee representativeness by including workers of different hierarchical levels and with different functions within the companies. The inclusion criteria were to be employed with a minimum of six months in the company and to perform operational or administrative tasks. Workers in management positions and those employees who did not complete the questionnaire autonomously were excluded.

Standardized scales with high validity and reliability were used to measure the variables organizational clarity and job absorption. Organizational repair capacity was assessed by adapting previous scales on work adjustment strategies, composed of six items on a Likert-type scale from 1 (never) to 7 (always), with questions focused on employees' ability to correct errors, modify work strategies, and learn from previous experiences. Work absorption was measured with the Utrecht Work Engagement Scale (UWES) by Schaufeli and Bakker (2004), using six items designed to assess concentration, fluency and immersion at work, also on a Likert-type scale from 1 (never) to 7 (always). A sociodemographic questionnaire was also included to collect information on age, gender, economic sector and work experience, with the aim of contextualizing the results obtained.

The data collection process was developed in four methodological phases. In the first phase, the questionnaire was designed and validated with the advice of experts in organizational psychometrics, carrying out a pilot test with 30 employees from different companies to evaluate the clarity and comprehension of the items. In the second phase, the questionnaires were applied in digital and face-to-face mode, guaranteeing the confidentiality of the answers and promoting voluntary participation. In the third phase, the statistical analysis of the data was carried out using the SPSS v.26 and R programs, applying descriptive and inferential statistical techniques. A simple linear regression model was estimated to evaluate

the relationship between repair and absorption, complemented with tests of normality (Kolmogorov-Smirnov, Shapiro-Wilk), homoscedasticity (Breusch-Pagan) and absence of autocorrelation (Durbin-Watson) to verify the fulfillment of the model assumptions. In the fourth phase, the results were interpreted and compared with previous studies on engagement and organizational management, in order to contextualize the findings within the existing literature.

The statistical model used in the regression analysis was formulated as follows:

$$\text{ABSORPTION}'_N = \beta_0 + \beta_1 \cdot \text{REPAIR}'_N + u$$

Where:

- ABSORPTION represents the dependent variable (level of immersion and concentration at work).
- REPAIR is the independent variable (ability to adjust and improve work performance).
- β_0 is the intercept of the model.
- β_1 is the regression coefficient, which measures the impact of repair capacity on labor absorption.
- UU represents the term random error.

The coefficients were estimated using the ordinary least squares (OLS) method, ensuring the best linear prediction of the dependent variable.

Results

The statistical analysis allowed to evaluate the relationship between repair capacity and labor absorption in employees of private companies in Montería, Colombia, using a simple linear regression model. The findings are presented at three levels of analysis: descriptive statistics, regression model estimation, and model diagnostic tests.

Descriptive statistics showed that employees exhibit moderately high levels of both repair capacity and work absorption, suggesting that most participants implement strategies to adjust and improve their work performance and experience high levels of immersion in their work. Table 1 presents the descriptive statistics of both variables under study.

Table 1. Descriptive Measures of the Variables Labor Repair and Absorption

Variable	Minimal	Maximum	Stocking	Standard deviation
Reparation	2.7	7.5	5.68	1.14
Absorption	2.9	7.4	5.76	1.17

The values indicate a homogeneous distribution of the data, with no extreme values that could affect the validity of the analysis.

The estimated simple linear regression model showed a positive and significant relationship between repair and labor absorption. Table 2 presents the coefficients of the regression model.

Table 2. Coefficients of Linear Regression

Variable	Coefficient	Standard Error	Value t	P-Value	95% confidence interval
Intercepto (β_0 \beta_0)	2.8135	0.3982	7.06	<0.001	[2.03, 3.60]
Repair (β_1 \beta_1)	0.1789	0.0394	4.54	<0.001	[0.10, 0.26]

The repair coefficient ($\beta_1 = 0.1789$ \beta_1 = 0.1789) is positive and statistically significant ($p < 0.001$), which indicates that for each unit of increase in repair capacity, an increase of 0.1789 units in labor absorption is expected. This finding confirms the hypothesis that employees who implement strategies to adjust and improve their performance experience higher levels of immersion and concentration in their work.

The intercept ($\beta_0=2.8135$ \beta_0 = 2.8135) suggests that, in the absence of organizational repair, employees still present a baseline level of absorption, implying that other factors also influence their level of engagement at work. The model presented a coefficient of determination $R^2=0.321$ $R^2 = 0.321$, which indicates that approximately 32.1% of the variability in labor absorption is explained by the capacity for repair, suggesting that this variable has a substantial effect on the way employees experience their relationship with work.

To guarantee the validity of the model, diagnostic tests were carried out, verifying compliance with the assumptions of linearity, normality of residuals, homoscedasticity and absence of autocorrelation. Table 3 presents the results of these tests.

Table 3. Model Diagnostic Tests

Test	Statistical	P-Value	Decision
Linearity (Ramsey test)	1.0913	0.5632	Linearity is not rejected
Waste Normality (Shapiro-Wilk)	0.9762	0.3127	Normality is accepted
Homoscedasticity (Breusch-Pagan)	1.2832	0.4183	There is no heteroskedasticity
Autocorrelation (Durbin-Watson)	2.0412	---	No autocorrelation

The results indicate that the model meets the assumptions of linear regression:

- There is a linear relationship between repair and labor absorption ($p = 0.5632$ in the Ramsey test).
- The residuals of the model follow a normal distribution ($p = 0.3127$ in the Shapiro-Wilk test).
- No heteroskedasticity was detected ($p = 0.4183$ on the Breusch-Pagan test).
- The residues do not present autocorrelation, according to the Durbin-Watson statistic ($DW=2.0412$ $DW = 2.0412$), which is within the acceptable range (1.5 - 2.5).

The findings obtained in this study confirm that organizational resilience is a significant predictor of labor absorption in employees of private companies, suggesting that an organizational culture that fosters continuous improvement and adjustability in work performance contributes to employees experiencing higher levels of concentration and commitment to their tasks.

Discussion

The results obtained in this study confirm that organizational repair capacity is a determining factor in the labor absorption of employees in private companies in Montería, Colombia. The simple linear regression model revealed a positive and significant relationship between these variables, indicating that employees who implement strategies to adjust and improve their performance experience higher levels of concentration, fluency, and immersion in their work tasks. This finding supports the hypothesis that

organizational repair is a key mechanism within human talent management, providing employees with tools to optimize their performance and maintain high levels of engagement at work.

From a theoretical perspective, these results coincide with the Labor Demands and Resources Model of Bakker and Demerouti (2007), which postulates that labor resources favor employee engagement by facilitating workload management. In this context, organizational repair can be considered a key resource that allows workers to adapt to changes, correct errors, and continuously improve their performance, which translates into greater absorption at work. Likewise, the Theory of Work Engagement by Schaufeli and Bakker (2004) reinforces the idea that absorption is one of the central dimensions of engagement and that it is favored by factors that enhance self-efficacy and confidence in the work environment. When employees are able to correct their work strategies and adapt them to the needs of the organization, they experience a greater sense of control over their roles and greater enjoyment in the execution of their tasks.

From a neuroscientific perspective, the processes of repair and self-regulation at work are related to the activation of the dorsolateral prefrontal cortex, which regulates strategic planning, decision-making, and attention control. In terms of Sweller's (1988) Cognitive Load Model, organizational repair capacity optimizes information management and reduces mental overload, allowing employees to direct their attention more efficiently and experience a deeper state of absorption in their work tasks. When workers have clarity on how to improve their performance and have tools to correct errors effectively, they can fully focus on their roles without unnecessary distractions.

The coefficient of determination of the model ($R^2=0.321R^2 = 0.321$) indicates that organizational repair explains approximately 32.1% of the variability in labor absorption, suggesting that, although repair capacity is a significant predictor, there are other factors that also influence employees' immersion in their work. Among these factors are work autonomy, the perception of support from leaders and organizational culture, which can play a fundamental role in the construction of a work environment that favors labor absorption. These findings open the possibility of carrying out broader studies that integrate multiple variables in the analysis of work engagement, allowing a more comprehensive understanding of the factors that favor the concentration and immersion of employees in their work activities.

One of the most relevant aspects of this study is the confirmation that organizational repair capacity not only impacts employee productivity, but also their emotional well-being and their ability to self-regulate at work. It was found that workers who perceive that their organizational environment encourages continuous improvement and the ability to adjust in work performance show lower levels of stress, greater job satisfaction, and a more proactive willingness to face challenges in their work environment. These results are consistent with previous research that has shown that employees' ability to correct mistakes and continuously improve their performance contributes to their level of engagement and reduces the likelihood of burnout (Rodríguez & Salanova, 2020).

While the study's findings are significant, it is important to consider some limitations. First, the sample used was composed of 250 employees of private companies, which, although it is an adequate number for statistical analysis, does not allow the results to be generalized to other labor populations, such as public sector employees or independent workers. In addition, as it was a cross-sectional study, it was not possible to evaluate how the relationship between organizational repair and labor absorption evolves over time. For future research, it is recommended to use longitudinal designs to analyze whether the perception of organizational repair remains constant or varies depending on changes in business management, organizational policies, or labor market conditions.

From an applied perspective, these findings suggest that companies should implement strategies that strengthen organizational resilience in order to improve labor absorption and employee engagement. Some key recommendations include:

- Promote continuous training programs, so that employees develop self-regulation skills and improve performance.

- Establish an organizational culture based on feedback and continuous improvement, in order to generate spaces in which employees can adjust their work strategies without fear of reprisals.
- Incorporate formative evaluation mechanisms in human talent management, allowing employees to identify areas for improvement and apply correction strategies in their functions.
- Foster transformational leadership, promoting human talent management focused on employee development and creating opportunities for continuous learning.

In conclusion, the present research provides empirical evidence on the importance of organizational repair capacity in the labor absorption of employees in private companies in Montería. It is confirmed that repair not only facilitates the adaptation and improvement of performance at work, but also has a positive impact on the concentration, motivation and well-being of employees. It is recommended that future research expand the analysis by incorporating other variables, such as the influence of organizational culture, leadership, and motivation on labor absorption, with the aim of identifying more comprehensive strategies to strengthen organizational commitment in the business sector.

Conclusions

The results of this study confirm that organizational repair capacity is a key factor in the labor absorption of employees in private companies in Montería, Colombia. Through econometric analysis based on a simple linear regression model, it was found that organizational repair has a positive and significant impact on labor absorption, indicating that employees who implement strategies to adjust and improve their performance experience higher levels of concentration, fluency, and commitment to their work activities. This finding supports the hypothesis that organizational repair is an essential mechanism for the development of work engagement, by providing employees with tools to optimize their performance and maintain high levels of immersion in work.

From a theoretical perspective, these results are aligned with the Work Engagement Theory of Schaufeli and Bakker (2004), which establishes that absorption is one of the fundamental dimensions of engagement and that it is favored by factors that enhance self-efficacy and confidence in the work environment. Likewise, the Labor Demands and Resources Model by Bakker and Demerouti (2007) reinforces the idea that organizational repair acts as a key resource that allows workers to better manage their labor demands, reducing fatigue and maximizing their level of absorption at work. In addition, from a neuroscientific perspective, the processes of repair and self-regulation at work are related to the activation of the dorsolateral prefrontal cortex, a region of the brain responsible for strategic planning and attention control. In terms of Sweller's (1988) Cognitive Load Model, organizational repair optimizes information management and reduces mental overload, allowing employees to experience a deeper state of absorption in their work tasks.

The model's coefficient of determination ($R^2=0.321R^2 = 0.321$) indicates that organizational repair explains approximately 32.1% of the variability in work absorption, suggesting that while repair capacity is a relevant predictor of work engagement, other factors such as autonomy at work, perception of support from leaders, and organizational culture may also influence employees' immersion in their Tasks. These findings open the possibility of carrying out broader studies that integrate multiple variables in the analysis of work engagement, allowing a more comprehensive understanding of the factors that favor the concentration and immersion of employees in their work activities.

One of the most relevant aspects of this study is the confirmation that organizational repair capacity not only impacts employee productivity, but also their emotional well-being and their ability to self-regulate at work. It was found that workers who perceive that their organizational environment encourages continuous improvement and the ability to adjust in work performance show lower levels of stress, greater job satisfaction, and a more proactive willingness to face challenges in their work environment. These results are consistent with previous research that has shown that employees' ability to correct mistakes and

continuously improve their performance contributes to their level of engagement and reduces the likelihood of burnout (Rodríguez & Salanova, 2020).

While the study's findings are significant, it is important to consider some limitations. First, the sample used was composed of 250 employees of private companies, which, although it is an adequate number for statistical analysis, does not allow the results to be generalized to other labor populations, such as public sector employees or independent workers. In addition, as it was a cross-sectional study, it was not possible to evaluate how the relationship between organizational repair and labor absorption evolves over time. For future research, it is recommended to use longitudinal designs to analyze whether the perception of organizational repair remains constant or varies depending on changes in business management, organizational policies, or labor market conditions.

From an applied perspective, these findings suggest that companies should implement strategies that strengthen organizational resilience in order to improve labor absorption and employee engagement. Some key recommendations include:

- Promote continuous training programs, so that employees develop self-regulation skills and improve performance.
- Establish an organizational culture based on feedback and continuous improvement, in order to generate spaces in which employees can adjust their work strategies without fear of reprisals.
- Incorporate formative evaluation mechanisms in human talent management, allowing employees to identify areas for improvement and apply correction strategies in their functions.
- Foster transformational leadership, promoting human talent management focused on employee development and creating opportunities for continuous learning.

In conclusion, the present research provides empirical evidence on the importance of organizational repair capacity in the labor absorption of employees in private companies in Montería. It is confirmed that repair not only facilitates the adaptation and improvement of performance at work, but also has a positive impact on the concentration, motivation and well-being of employees. It is recommended that future research expand the analysis by incorporating other variables, such as the influence of organizational culture, leadership, and motivation on labor absorption, with the aim of identifying more comprehensive strategies to strengthen organizational commitment in the business sector.

References

- kker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Schfeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315.
- 3.elle J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- RoguezA., & Salanova, M. (2020). The role of self-efficacy and resilience in work engagement: A longitudinal study. *Journal of Work and Organizational Psychology*, 36(1), 1-10.
- Cohen. M.& Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128-152.
- Zahra, S., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *Academy of Management Review*, 27(2), 185-203.
- Lane, P. Joka. R., & Pathak, S. (2006). The reification of absorptive capacity: A critical review and rejuvenation of the construct. *Academy of Management Review*, 31(4), 833-863.
- Minbaeva, D. BPedeen, T., Björkman, I., Fey, C. F., & Park, H. J. (2003). MNC knowledge transfer, subsidiary absorptive capacity, and HRM. *Journal of International Business Studies*, 34(6), 586-599.
- Liao, J., Welsch, & oica, M. (2003). Organizational absorptive capacity and responsiveness: An empirical investigation of growth-oriented SMEs. *Entrepreneurship Theory and Practice*, 28(1), 63-85.
- Miles, R. E., & Snc. C.2003). *Organizational Strategy, Structure, and Process*. Stanford University Press.
- Zapata, L., & HernándezM. (28). Absorptive capacity and its relationship with innovation in SMEs. *Revista Venezolana de Gerencia*, 23(82), 113-128.

- Zou, H., Ertug, G., & Geo, G. (2018). The capacity to innovate: A meta-analysis of absorptive capacity. *Innovation: Organization & Management*, 20(2), 87-121.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600-619.
- Kahn, W. A. (1992). To be fully present: Psychological presence at work. *Human Relations*, 45(4), 321-349.
- Hakala, H. (2010). Strategic orientations management literature: Three approaches to understanding the interaction between market, technology, entrepreneurial and learning orientations. *International Journal of Management Reviews*, 13(2), 199-217.
- Van den Bosch, F. A. J., Volberda, H., & de Boer, M. (1999). Coevolution of firm absorptive capacity and knowledge environment: Organizational forms and combinative capabilities. *Organization Science*, 10(5), 551-568.
- Tsai, W. (2001). Knowledge transfer in interorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal*, 44(5), 996-1004.
- Griffith, R., Redding, S., & Van Reenen, J. (2003). R&D and absorptive capacity: Theory and empirical evidence. *Scandinavian Journal of Economics*, 105(1), 99-118.
- Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17(S2), 27-43.
- Nieto, M., & Quevedo, P. (2005). Absorptive capacity, technological opportunity, knowledge spillovers, and innovative effort. *Technovation*, 25(10), 1141-1157.
- Jansen, J. J. P., Van Den Bosch, F. A. J., & Volberda, H. W. (2005). Managing potential and realized absorptive capacity: How do organizational antecedents matter? *Academy of Management Journal*, 48(6), 999-1015.
- Becker, W., & Peters, J. (2000). Technological opportunities, absorptive capacities, and innovation. *Volkswirtschaftliche Diskussionsreihe*, 212, 1-27.
- Stock, G. N., Greis, N. P., & Fischer, W. A. (2001). Absorptive capacity and new product development. *Journal of High Technology Management Research*, 12(1), 77-91.