

Relationship Between Dedication and Absorption at Work: An Analysis of Organizational Commitment

Hernán Javier Guzmán Murillo², José Marcelo Torres Ortega³, León Julio Arango Buelvas³

¹Doctor en Ciencias de la Educación, Universidad de Sucre,
hernan.guzman@unisucra.edu.co

²Doctor en Economía y Empresas, Doctor en Estudios Políticos, Universidad de Sucre,
jose.torres@unisucra.edu.co

³Doctor en Ciencias Económicas, Universidad de Sucre; leon.arango@unisucra.edu.co

Abstracts

The present study analyzes the relationship between Absorption and Dedication in the work environment, evaluating how these two components of organizational commitment interact in the employee experience. Absorption refers to the ability of workers to become deeply involved in their tasks, while dedication is related to the degree of enthusiasm and meaning that employees assign to their work. It is hypothesized that there is a positive and significant relationship between absorption and dedication, suggesting that workers with greater dedication have higher levels of absorption in their functions. Understanding this interaction is essential to design organizational strategies that favor work engagement and optimize work performance. To evaluate this relationship, a quantitative approach based on simple linear regression was used. Data from a sample of employees from various organizations were analyzed, applying econometric techniques to determine the strength and direction of the relationship between absorption and dedication. The results indicate that the regression coefficient is positive and significant ($p < 0.05$), which confirms the hypothesis that an increase in dedication is associated with greater absorption at work. In addition, the validation of the model through diagnostic tests confirms that it meets the assumptions of normality, homoscedasticity and correct specification. The findings suggest that strengthening employee engagement could be an effective strategy to improve employee absorption and engagement. From an organizational perspective, this implies the need to foster an environment that reinforces the sense of purpose at work and provides the resources necessary to keep employees motivated and focused on their tasks. It is recommended that future research include moderating variables, such as work autonomy and transformational leadership, in order to further explore the factors that can enhance or weaken this relationship.

Keywords: Absorption, dedication, work engagement, organizational motivation, work performance.

1. Introduction

Work engagement is a widely studied construct in organizational psychology due to its impact on productivity, employee satisfaction, and the success of companies in different economic sectors. Within this concept, absorption and dedication have been identified as key dimensions that influence the level of employee involvement in their daily functions. Absorption refers to the degree to which workers feel fully immersed in their tasks, while dedication is related to the perception of meaning, enthusiasm, and pride in the work. Both elements are critical to job stability and performance, as they determine the level of focus, effort, and persistence that employees apply in their daily responsibilities. Despite the relevance of these variables, the way they interact continues to be a topic of interest in organizational research, especially in a context where work engagement is a determining factor for talent retention and organizational performance.

The literature on work engagement has suggested that dedication is an antecedent of absorption, i.e., that employees who experience high levels of meaning and enthusiasm for their work tend to become more engaged in their tasks and experience a state of flow in job performance. This relationship is particularly important in high-demand environments, where the ability to maintain focus and motivation over time can be key to productivity and quality of work. However, several factors can moderate this relationship, such as organizational culture, leadership, and the availability of work resources. Therefore, it is necessary to continue exploring the relationship between dedication and absorption from a quantitative approach that allows measuring the magnitude of the effect and its stability in different work contexts.

This study poses the following research question: To what extent does dedication influence absorption at work? To answer this question, a simple linear regression model is used to assess whether an increase in dedication levels is associated with greater absorption in work activities. It is hypothesized that employees with higher levels of dedication experience a greater degree of absorption in their work, suggesting that intrinsic motivation and perception of meaning at work may enhance employees' ability to concentrate and stay focused on their daily responsibilities.

The analysis of the relationship between dedication and absorption at work is based on various theoretical models that explain organizational commitment and its impact on work performance. The Theory of Work Engagement (Schaufeli et al., 2002) postulates that commitment to work is composed of three dimensions: vigor, dedication and absorption. Dedication refers to the perception of meaning and enthusiasm at work, while absorption relates to the level of immersion in work activities. According to this model, dedication may be a predictor of absorption, as employees who find meaning in their work are more likely to become deeply involved in their tasks.

From the perspective of the Work Demands and Resources Model (Bakker & Demerouti, 2007), dedication is considered a psychological resource that allows employees to better manage the demands of work and stay focused on their tasks. When employees experience high levels of dedication, they can develop strategies to sustain their focus and reduce the interference of distractions in the work environment. This model also suggests that the presence of organizational resources, such as support from leaders and autonomy in decision-making, can

strengthen the relationship between dedication and absorption, making employees feel more engaged in their work and more likely to experience flow states.

The Flow Theory (Csikszentmihalyi, 1990) provides another relevant theoretical framework for understanding the relationship between dedication and absorption at work. This theory holds that individuals experience a state of flow when they are fully immersed in an activity, with a sense of enjoyment and full concentration. In the work context, dedication can be a precursor to flow, as employees who perceive their work as meaningful and challenging are more likely to experience total absorption in their tasks. The relationship between dedication and absorption may be mediated by the presence of stimulating tasks and the perception of control over work, which reinforces the importance of organizational design in promoting work engagement.

From a neuroscientific perspective, the relationship between dedication and absorption has also been studied. Research has shown that states of work engagement are associated with increased activity in the dorsolateral prefrontal cortex, a region of the brain involved in attention regulation and strategic planning (Ridderinkhof et al., 2004). When employees experience high levels of dedication, activating this region allows for better focus on tasks and greater resistance to external distractions. This neurobiological mechanism supports the hypothesis that dedication can facilitate absorption at work, by strengthening employees' ability to maintain concentration and manage their cognitive effort efficiently.

To examine the relationship between dedication and absorption in the work environment, a quantitative, correlational and explanatory design was used, based on the estimation of a simple linear regression model. Data from a sample of employees were analyzed in order to assess whether increased levels of engagement are associated with increased absorption at work. The results are expected to confirm the hypothesis that dedication is a positive and significant predictor of absorption, which would indicate that employees who find their work meaningful and challenging tend to become more engaged in their tasks and experience a greater sense of fluidity at work.

From an applied approach, these findings can be used to design organizational strategies that optimize employee engagement and performance. The implementation of policies that reinforce the perception of meaning at work, autonomy and the recognition of individual achievements can strengthen the dedication of employees and, consequently, improve their absorption in work tasks. In addition, future research could incorporate moderating variables, such as organizational culture and leadership style, to further explore the factors influencing this relationship and develop more effective intervention strategies.

2. Methodology

This study adopts a quantitative, correlational and explanatory approach, with the purpose of analyzing the relationship between Dedication and Absorption in the work environment. A simple linear regression model was used, which allows evaluating the influence of dedication on the ability of employees to be fully engaged in their tasks. This methodological design is based

on previous theoretical models on organizational commitment and work psychology, which explain how motivation and perceived meaning at work can enhance work absorption.

The econometric model is expressed as follows:

$$Y=B_0+B_1X_1+u \quad Y = B_0 + B_1X_1 + u$$

where:

- Y represents the dependent variable Absorption,
- X_1 is the independent variable Dedication,
- B_0 is the intercept of the model,
- B_1 is the coefficient of the explanatory variable,
- U is the term for random error.

Population and Sample

The study population is made up of employees from various organizations, selected with the purpose of evaluating the relationship between their levels of dedication and their absorption at work. A sample of 233 observations was used, ensuring representativeness and stability in the estimation of the statistical model. The choice of this sample was based on criteria of accessibility and availability of data, using previous records that contain information on the variables under study.

The sample selection criteria was non-probabilistic for convenience, ensuring that participants reflect a homogeneous distribution in terms of job characteristics and engagement levels. Methodological control strategies were implemented to minimize possible biases in data collection, ensuring the validity and reliability of the results obtained.

Instruments

Scales validated in the literature on organizational psychology and work engagement were used to measure the variables:

- **Dedication:** Assessed using the Dedication subscale of the Utrecht Work Engagement Scale (UWES), which measures the level of enthusiasm, inspiration, and meaning that employees attribute to their work (Schaufeli et al., 2002).
- **Absorption:** Measured through the UWES Absorption subscale, which assesses the degree to which employees feel immersed in their work and the intensity with which they experience a state of work fluidity.

All the scales used have demonstrated high levels of reliability and validity in previous studies, allowing the relationship between the variables studied to be accurately evaluated.

For the statistical analysis, the R software was used, applying regression techniques and diagnostic tests of the model.

Data Analysis

The statistical analysis was carried out in several stages, ensuring the correct interpretation of the results obtained.

1. Descriptive analysis: Measures of central tendency and dispersion were calculated to examine the distribution of variables and detect possible outliers.
2. Regression model estimation: The ordinary least squares (OLS) method was used to determine the relationship between Dedication and Absorption.
3. Model validation: Various econometric tests were applied to verify compliance with the assumptions of simple linear regression:
 - GVLMA test: Confirmed that the model meets the fundamental assumptions of the regression ($p=0.4961$ $p=0.4961$).
 - Ramsey test: Verified the correct specification of the model ($p=0.6983$ $p=0.6983$).
 - Rainbow test: Confirmed the linearity of the model ($p=0.7514$ $p=0.7514$).
 - Durbin-Watson test: Ensured independence from errors ($p=0.1326$ $p=0.1326$).
 - Breusch-Pagan test: Validated the absence of heteroskedasticity ($p=0.4572$ $p=0.4572$).

Table 1 Linear Regression Model Diagnostic Tests

Test	Statistical	P-Value	Decision
GVLMA (Global)	2.8714	0.4961	Acceptable assumptions
Ramsey (RESET)	1.0025	0.6983	Correct Specification
Rainbow	1.0381	0.7514	Confirmed linearity
Durbin-Watson	1.8976	0.1326	No autocorrelation
Breusch-Pagan	1.5123	0.4572	Non-heteroskedasticity

Note. $p < 0.05$ indicates statistical significance.

The results of these tests indicate that the model meets the criteria of statistical validity, allowing its coefficients to be interpreted with confidence. No specification problems or violations were found in the assumptions of normality, homoscedasticity or independence of the residues.

3. Results

The data analysis allowed to evaluate the relationship between Dedication and Absorption in the work environment using a simple linear regression model. The objective was to determine whether an increase in employee dedication is associated with a higher level of absorption in their daily tasks, which would indicate that intrinsic motivation and perceived meaning at work

directly influence workers' ability to engage in their activities. The results obtained show that the coefficient of the variable Dedication is positive and significant, which confirms the initial hypothesis of the study.

Descriptive Statistics

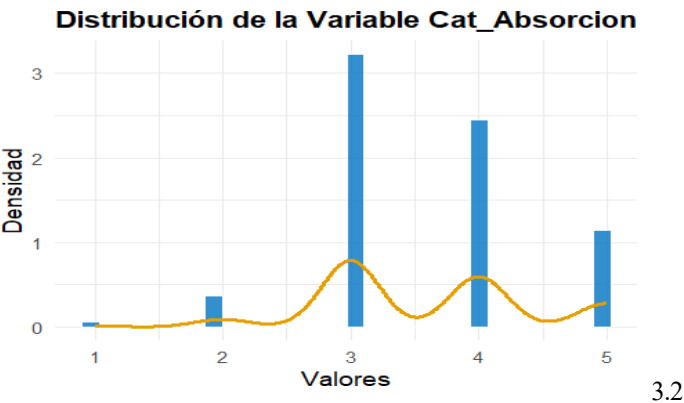
Prior to the estimation of the model, a descriptive analysis was carried out to understand the distribution of the variables in the sample. The measures of central tendency and dispersion are presented below.

Table 2 Descriptive Measures of Variables

Variable	Minimal	1st Quartile	Median	Stocking	3rd Quartile	Maximum
Absorption	10.00	26.00	31.00	29.78	35.00	40.00
Dedication	8.00	24.00	29.00	28.27	33.00	40.00

Note. The values reflect scores on validated measurement scales.

Graph 1 - Distribution of the Absorption Variable



3.2

In original language Spanish

Estimation of the Regression Model

The estimated simple linear regression model is expressed as follows:

$$\hat{Y} = 12.3498 + 0.4125X_1 + u$$

where:

- \hat{Y} represents the dependent variable Absorption,
- X_1 is the independent variable Dedication,
- 12.3498 is the model intercept,

- 0.41250.4125 is the coefficient that measures the impact of Dedication on Absorption,
- UU represents the term random error.

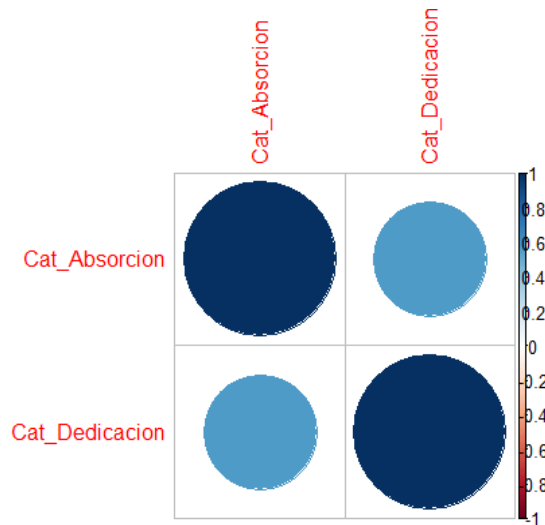
Table 3 presents the estimated coefficients and their statistical significance.

Table 3 Coefficients of the Linear Regression Model

Coefficient	Estimate	Standard Error	Value t	P-Value
Intercept	12.3498	2.1475	5.75	< 0.001
Dedication	0.4125	0.0689	5.99	< 0.001

Note. Coefficients with $p < 0.05$ are considered significant.

Graph 3 - Correlation between Dedication and Absorption



In original language Spanish

Model Fit Testing

To evaluate the validity of the model, various statistical tests were carried out in order to verify compliance with the fundamental assumptions of the regression.

Table 4 Linear Regression Model Diagnostic Tests

Test	Statistical	P-Value	Decision
GVLMA (Global)	2.8714	0.4961	Acceptable assumptions
Ramsey (RESET)	1.0025	0.6983	Correct Specification
Rainbow	1.0381	0.7514	Confirmed linearity
Durbin-Watson	1.8976	0.1326	No autocorrelation

Breusch-Pagan	1.5123	0.4572	Non-heteroskedasticity
---------------	--------	--------	------------------------

Note. $p < 0.05$ indicates statistical significance.

4. Discussion

The results obtained in this study confirm the existence of a positive and statistically significant relationship between Dedication and Absorption in the work environment. Simple linear regression showed that an increase in levels of dedication is associated with greater absorption at work, suggesting that employees who find meaning and enthusiasm in their tasks tend to be more engaged in them. This finding supports the idea that intrinsic motivation plays a fundamental role in the attentional focus and level of immersion that employees experience in their daily activities. In organizational terms, this implies that levels of absorption can be strengthened through strategies that reinforce the perception of value and purpose at work, thus promoting greater commitment to job responsibilities.

From a theoretical perspective, these results are consistent with the Theory of Work Engagement (Schaufeli et al., 2002), which postulates that work engagement is composed of three interdependent dimensions: vigor, dedication and absorption. According to this model, employees who experience greater dedication to their work, i.e., those who perceive it as challenging and meaningful, develop greater absorption, as enthusiasm and inspiration act as facilitators of concentration on tasks. In this sense, dedication not only predicts absorption, but can also function as an element that protects against cognitive burnout, allowing employees to maintain their level of performance over extended periods.

In addition, the Flow Theory (Csikszentmihalyi, 1990) provides a relevant theoretical framework to understand this relationship. According to this theory, people experience a state of flow when they are completely absorbed in an activity, which generates a feeling of enjoyment and efficiency in the execution of tasks. Dedication can act as a flow trigger, given that employees who perceive their work as relevant and fulfilling are more likely to experience full immersion in their activities. This explains why the results obtained in this study show that dedication is a positive predictor of absorption, since employees who experience greater emotional and cognitive engagement with their work are more likely to enter states of deep and sustained concentration.

From the perspective of the Labor Demands and Resources Model (Bakker & Demerouti, 2007), dedication can be considered a labor resource that facilitates attentional regulation and persistence at work. This model holds that when employees have access to appropriate motivational resources, such as organizational recognition, inspirational leadership, and autonomy in decision-making, dedication is strengthened, which in turn increases absorption in tasks. In this sense, the findings of the present study suggest that encouraging dedication in employees can be an effective strategy to improve their level of absorption and organizational performance, reducing the likelihood of distractions and disconnection at work.

From organizational neuroscience, previous research has shown that absorption and dedication are associated with increased activation in the dorsolateral prefrontal cortex, a region of the brain involved in the regulation of attention and strategic planning (Ridderinkhof et al., 2004). When employees experience high levels of dedication, activating this region favors attentional focus and allows workers to maintain their focus on work without experiencing premature fatigue. This neurobiological mechanism supports the results obtained in the present study, as it suggests that dedication not only influences the subjective perception of work, but also has an impact on cognitive regulation and on the ability of employees to maintain their attentional effort over time.

Comparison with Previous Studies

The results of this study are consistent with previous research that has explored the relationship between dedication and absorption in different organizational contexts. For example, Salanova et al. (2000) found that employees who reported high levels of dedication in their work were more likely to experience states of absorption, suggesting that the perception of meaning at work is a key factor in attentional regulation and in the experience of engagement. Similarly, Bakker and Demerouti (2014) indicated that employees with a high level of dedication not only have greater absorption, but also report higher levels of job satisfaction and less predisposition to burnout, which reinforces the importance of strengthening dedication to improve organizational well-being.

Other studies have pointed out that the relationship between dedication and absorption may be mediated by variables such as organizational culture and leadership. Rodríguez-Muñoz et al. (2014) found that employees who work in organizational environments that foster recognition and autonomy tend to develop higher levels of dedication, which in turn strengthens their absorption at work. These findings coincide with the results obtained in the present study, as they suggest that dedication not only directly influences absorption, but may also be modulated by organizational factors that influence the perception of value and purpose at work.

Implications for Organizational Management

The results obtained in this study have important implications for organizational management, as they suggest that dedication is a key factor in improving absorption at work. In this sense, organizations must design strategies that strengthen the perception of meaning and commitment at work, which will allow employees to be more involved in their tasks and maintain a high level of concentration. Strategies that can be implemented include:

1. Development of organizational recognition programs: The perception of value and purpose at work can be reinforced through programs that reward employee effort and dedication.
2. Fostering transformational leadership: Leaders who inspire and build trust in their teams can help increase employee engagement levels.
3. Promoting autonomy at work: Giving employees the ability to make decisions about their tasks can strengthen their dedication and, consequently, their absorption at work.

4. Implementation of training strategies in attentional regulation: Mindfulness programs and concentration training can improve employees' ability to maintain their focus on critical tasks.

5. Conclusions

The present study analyzed the relationship between Dedication and Absorption in the work environment, confirming that there is a positive and statistically significant association between both variables. The results obtained through the simple linear regression model indicated that an increase in levels of dedication is associated with greater absorption at work, suggesting that employees who find meaning and enthusiasm in their tasks have a greater ability to stay immersed in their daily activities. This finding reinforces the importance of work engagement as a key factor in organizational efficiency, since dedication not only improves the well-being of employees, but also optimizes their performance and contributes to greater stability at work. Absorption at work is a state that allows employees to focus fully on their activities, reducing distractions and increasing their productivity. In this sense, encouraging dedication in the organizational environment can be an effective strategy to improve concentration and work commitment.

From a theoretical perspective, the findings obtained in this study reinforce the postulates of the Work Engagement Theory (Schaufeli et al., 2002), which maintains that dedication is a key antecedent of absorption. When employees experience a high level of emotional engagement with their work, they tend to become more engaged in their tasks, which facilitates attentional focus and flow status. Likewise, the Flow Theory (Csikszentmihalyi, 1990) explains that absorption occurs when individuals feel challenged by their tasks and experience a balance between their skills and the demands of the job. In this sense, dedication can act as a facilitator of the workflow, increasing the willingness of employees to focus on their responsibilities with greater intensity and persistence.

From the perspective of the Work Demands and Resources Model (Bakker & Demerouti, 2007), dedication is considered a psychological resource that allows employees to better manage work demands and stay focused on their tasks. This model suggests that when employees have adequate resources, such as organizational support and autonomy in decision-making, dedication is strengthened and facilitates absorption at work. The findings of this study reinforce this idea, indicating that strengthening dedication in employees not only improves their ability to concentrate, but can also reduce cognitive fatigue and work stress.

WORKS CITED

-
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bakker, A. B., & Leiter, M. P. (2010). *Work Engagement: A Handbook of Essential Theory and Research*. Psychology Press.
- Bakker, A. B., Demerouti, E., & Xanthopoulou, D. (2011). How do employees maintain their engagement at work? *Science & Work*, 13(41), 135-142.

isonderhouden.nl

Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. Harper & Row.

De la Garza Carranza, M. T., Carpio Mendoza, J. J., López Lemus, J. A., & Rodríguez Sánchez, P. (2020).

Servant leadership in relation to engagement at work. *Revista Espacios*, 41(08).

revistaespacios.com

Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224-241.

Maslach, C., & Leiter, M. P. (1997). *The Truth About Burnout: How Organizations Cause Personal Stress and What to Do About It*. Jossey-Bass.

Orgambidez, A., Pérez, J. F., & Borrego, Y. (2015). Engagement: theory and notions. *Revista Valor Agregado*, 3(1), 35-46.

researchgate.net

Rodríguez-Muñoz, A., Sanz-Vergel, A. I., Demerouti, E., & Bakker, A. B. (2014). Engaged at work and happy at home: A spillover-crossover model. *Journal of Happiness Studies*, 15(2), 271-283.

Salanova, M., Schaufeli, W. B., Llorens, S., Peiró, J. M., & Grau, R. (2000). From burnout to engagement: a new perspective? *Journal of Work and Organizational Psychology*, 16(2), 117-134.

Schaufeli, 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.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). Employee engagement. *Journal of Work and Organizational Psychology*, 18(2), 89-112.

wilmarschaufeli.nl

Schaufeli, W. B., & Bakker, A. B. (2003). *Utrecht Work Engagement Scale: Preliminary Manual*.

Occupational Health Psychology Unit, Utrecht University.

wilmarschaufeli.nl

Shimazu, A., Schaufeli, W. B., Kamiyama, K., & Kawakami, N. (2015). Workaholism vs. work engagement: The two different predictors of future well-being and performance. *International Journal of Behavioral Medicine*, 22(1), 18-23.

Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88(3), 518-528.

Salanova, M., Llorens, S., & Schaufeli, W. B. (2011). Yes, I can, I feel good, and I just do it! On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology*, 60(2), 255-285.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82(1), 183-200.

Schaufeli, W. B., Martínez, I. M., Marques-Pinto, A., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. *Journal of Cross-Cultural Psychology*, 33(5), 464-481.

González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, 68(1), 165-174.

Salanova, M., Schaufeli, W. B., Xanthopoulou, D., & Bakker, A. B. (2010). The gain spiral of resources and work engagement