

Determinants of Organizational Commitment: A Multivariate Analysis of Personal and Job-Related Factors among Managers in a Public-Sector Port Authority Context

Brihmouche Imad Eddine

PhD

Abdelhamid Mehri University – Constantine 2
Algeria

E-mail: ibrih48@gmail.com

Birouk Hana Nor Elhouda

Professor

Abbes Laghrour University – Khenchela 2
Algeria

E-mail: hana.birouk@univ-khenchela.dz

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Abstract

This study provides a rigorous and multidimensional empirical investigation into the determinants of organizational commitment within a strategic public-sector enterprise. Anchored in the three-component model of organizational commitment developed by Allen and Meyer (1990), the research adopts a quantitative, comparative-descriptive design to examine the influence of selected personal and job-related variables on employee commitment within the Port of Djen Djen (Jijel, Algeria). Primary data were collected through a structured questionnaire administered to a purposive sample of 76 participants representing diverse administrative and operational directorates. The dataset was analyzed using SPSS, employing advanced inferential statistical techniques, including one-way analysis of variance (ANOVA), independent samples t-tests, and correlation analysis, to identify statistically significant differences across demographic and organizational variables. The findings reveal that organizational commitment is a multidimensional construct significantly influenced by age, gender, departmental affiliation, and professional experience. Specifically, affective and normative commitment were found to vary significantly with professional experience, while continuance commitment was primarily shaped by gender and departmental context. Notably, continuance commitment emerged as the dominant dimension, indicating that employee retention is largely driven by instrumental considerations, such as job security and perceived costs of leaving, rather than emotional attachment. From a theoretical perspective, the study contributes to the organizational behavior literature by providing context-specific empirical evidence from a public-sector infrastructure organization—an area that remains underrepresented in existing research. The findings reinforce the multidimensional nature of organizational commitment and highlight the importance of examining its determinants through a differentiated analytical lens. From a practical standpoint, the results underscore the necessity of adopting evidence-based and targeted human resource management strategies aimed at strengthening affective commitment, enhancing employee engagement, and fostering organizational loyalty. The study concludes with a set of policy-oriented recommendations designed to support sustainable organizational performance through data-driven and context-sensitive HR interventions.

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INTRODUCTION

In contemporary organizational environments characterized by increasing complexity and competitive pressures, human resources have emerged as a central determinant of institutional performance and long-term sustainability. Beyond their functional roles, employees constitute strategic assets whose attitudes, behaviors, and levels of engagement directly influence organizational effectiveness. Accordingly, the capacity of an organization to achieve its objectives is not solely contingent upon technical competencies or formal qualifications, but rather on the extent to which employees demonstrate commitment, motivation, and alignment with organizational goals.

While skills, expertise, and professional training remain essential components of workforce performance, they are insufficient in isolation to ensure organizational success. A growing body of research in organizational behavior emphasizes that employee commitment—particularly affective and normative attachment to the organization—serves as a critical driver of productivity, innovation, and institutional resilience. Organizational commitment reflects a psychological bond that motivates individuals to exert discretionary effort, support organizational values, and maintain long-term affiliation.

In this context, understanding the determinants of organizational commitment has become a priority for both scholars and practitioners. Employee commitment is shaped by a complex interplay of personal characteristics, job-related factors, and organizational conditions. Identifying and analyzing these determinants is essential for designing effective human resource strategies aimed at enhancing engagement, strengthening loyalty, and improving overall organizational performance. Consequently, this study seeks to contribute to the ongoing discourse by examining the factors that influence organizational commitment within a specific institutional context.

Problem Statement

Despite the recognized importance of organizational commitment, many institutions continue to face challenges in fostering high levels of employee attachment and engagement. Organizational commitment has been conceptualized as a psychological state that binds the individual to the organization, influencing their willingness to contribute to organizational goals and remain within the institution over time. As noted in the literature, commitment is closely associated with positive organizational outcomes, including improved performance, reduced turnover, and enhanced job satisfaction.

However, the level of commitment exhibited by employees is not uniform and varies according to a range of influencing factors. Personal attributes such as age, gender, and educational background, as well as job-related variables including work experience, departmental affiliation, and organizational environment, play a significant role in shaping employee attitudes and behaviors. These variables interact in complex ways, making it difficult to isolate their individual effects on organizational commitment.

Given this complexity, there is a need for empirical investigation to better understand how these factors influence commitment within specific organizational settings. Therefore, the central research problem of this study can be formulated as follows:

What is the nature of the relationship between selected personal and job-related variables and organizational commitment?

To address this overarching question, the study further explores the following sub-questions:

- To what extent do age differences influence organizational commitment?
- Are there statistically significant variations in commitment attributable to gender?
- Does departmental affiliation affect the level of organizational commitment?
- How does professional experience contribute to differences in organizational commitment?

Research Hypotheses

Based on the theoretical framework and existing literature, this study posits the following main hypothesis:

H1: There are statistically significant differences in organizational commitment attributable to selected personal and job-related variables.

To operationalize this hypothesis, the study formulates the following sub-hypotheses:

- H1a: Organizational commitment varies significantly across different age groups.
- H1b: Organizational commitment differs significantly between male and female employees.
- H1c: Organizational commitment is significantly influenced by departmental affiliation within the organization.
- H1d: Organizational commitment varies significantly according to levels of professional experience.

These hypotheses provide a structured framework for analyzing the determinants of organizational commitment and facilitate a systematic examination of how individual and organizational factors shape employee attachment and behavior within the institutional context.

LITERATURE REVIEW

Organizational commitment has been widely examined within the fields of organizational behavior and human resource management as a key determinant of employee performance, retention, and institutional effectiveness. The existing body of literature reflects a growing consensus that organizational commitment is a multidimensional construct shaped by a complex interaction of personal, job-related, and organizational factors (Allen & Meyer, 1990; Meyer et al., 1993). Contemporary research further emphasizes its strategic importance in enhancing organizational sustainability and competitive advantage (Cohen, 2020; Ghani et al., 2022).

Early empirical studies primarily focused on identifying the antecedents of organizational commitment, particularly individual-level variables such as age, gender, educational attainment, and professional experience. For instance, Al-Jumaili (2012) demonstrated a strong positive relationship between these personal characteristics and levels of organizational commitment among employees in educational institutions. Similarly, Demir (2011) found that demographic and occupational variables, including gender, job role, and educational background, significantly influenced commitment levels, although the effects of age and experience were less pronounced. These findings suggest that individual attributes play a critical, albeit context-dependent, role in shaping employee attachment to organizations.

In contrast, other studies have reported mixed or even contradictory findings regarding the influence of personal variables. Orpen (1993), for example, identified professional experience as a significant predictor of organizational commitment, arguing that longer tenure fosters stronger psychological attachment through accumulated organizational knowledge and stability. However, Al-Tajam (1995) found no statistically significant relationship between personal variables and commitment, instead highlighting the dominant role of organizational and structural factors. These inconsistencies indicate that the relationship between personal characteristics and organizational commitment is not universally stable and may vary across institutional and cultural contexts.

Beyond individual attributes, a substantial body of research has explored the impact of organizational and relational factors on commitment. Al-Fadly (1997) demonstrated that the quality of supervisor-subordinate relationships significantly enhances organizational commitment, reinforcing the importance of social exchange dynamics within the workplace. This perspective aligns with more recent studies emphasizing the role of organizational support, leadership, and work environment in fostering employee engagement and commitment (Rhoades & Eisenberger, 2002; Saks, 2019; Khan et al., 2021). Furthermore, research on high-performance work practices suggests that organizational commitment is closely linked to human resource strategies that promote employee empowerment, trust, and psychological well-being (Guest, 2017; Farndale et al., 2019).

Recent advances in the literature have also highlighted the multidimensional nature of organizational commitment, particularly through the widely adopted three-component model, which distinguishes between affective, continuance, and normative commitment (Allen & Meyer, 1990). Empirical studies consistently demonstrate that these dimensions are influenced by different sets of factors and may have varying implications for organizational outcomes. For instance, continuance commitment is often associated with perceived costs of leaving the organization, while affective commitment reflects emotional attachment and identification with organizational goals (Meyer, 2016; Ng & Feldman, 2015).

Despite the extensive research on organizational commitment, there remains a notable gap in context-specific empirical studies, particularly within strategic public-sector institutions and infrastructure organizations. Much of the existing literature is concentrated in Western or corporate environments, with limited attention given to public enterprises operating in developing or transitional economies. Moreover, few studies adopt a comprehensive approach that simultaneously examines multiple personal and job-related variables within a single analytical framework.

Accordingly, the present study seeks to address this gap by providing an integrated analysis of organizational commitment within the Port of Djen Djen, a strategically significant public-sector institution. By combining demographic, professional, and organizational variables within a unified empirical model, this research contributes to the literature by offering contextually grounded insights into the determinants of organizational commitment. In doing so, it extends existing theoretical perspectives and provides a more nuanced understanding of how commitment is shaped within complex institutional environments.

Rationale for Selecting the Research Topic

Organizational commitment has emerged as a central construct within organizational behavior and human resource management, reflecting its profound influence on both individual performance and institutional effectiveness. In increasingly complex and competitive environments, organizations are required not only to attract and retain skilled employees but also to cultivate a workforce that is psychologically engaged and aligned with organizational objectives. Within this context, organizational commitment represents a critical mechanism through which employees internalize organizational values, demonstrate loyalty, and contribute to long-term institutional sustainability.

Extant literature consistently emphasizes that employee commitment extends beyond formal job responsibilities and technical competencies, encompassing a deeper psychological attachment that drives discretionary effort and proactive engagement. As such, organizational commitment plays a pivotal role in shaping key outcomes, including job satisfaction, employee retention, productivity, and organizational resilience. Understanding the antecedents and dynamics of commitment is therefore essential for designing effective organizational strategies aimed at enhancing workforce stability and performance.

Given its strategic importance, the present study is motivated by the need to provide context-specific empirical insights into the determinants of organizational commitment, particularly within public-sector institutions where structural and operational complexities may influence employee attitudes in distinct ways.

Significance of the Study

This study contributes to both theoretical and practical domains by examining the relationship between selected personal and job-related variables and organizational commitment within a real-world organizational setting. By focusing on employees of the Port of Djen Djen, a strategically significant public enterprise, the research provides empirically grounded insights into how demographic and professional factors interact to shape commitment levels.

From a theoretical perspective, the study advances the existing literature by offering a contextually nuanced analysis of organizational commitment in a public-sector infrastructure environment, which remains relatively underexplored in prior research. It enhances our understanding of how individual characteristics and organizational conditions jointly influence employee attitudes, thereby extending established theoretical frameworks.

From a practical standpoint, the findings hold important implications for organizational leaders and policymakers. By identifying the key determinants of organizational commitment, the study provides a foundation for developing targeted human resource strategies aimed at strengthening employee engagement, fostering organizational loyalty, and improving overall institutional performance. In this regard, the study supports evidence-based decision-making in the design and implementation of effective management practices.

Objectives of the Study

The primary objective of this study is to develop a comprehensive and theoretically grounded understanding of organizational commitment within a specific institutional context. To achieve this objective, the study pursues the following goals:

- To examine the conceptual and theoretical foundations of organizational commitment, with particular reference to its multidimensional nature.
- To analyze the impact of selected personal variables (e.g., age, gender, educational level) and job-related factors (e.g., departmental affiliation, professional experience) on organizational commitment.
- To provide empirically validated insights into the determinants of commitment among employees within the Port of Djen Djen.
- To formulate practical recommendations aimed at enhancing organizational commitment through targeted human resource interventions.

By addressing these objectives, the study seeks to bridge the gap between theory and practice, contributing to both academic discourse and organizational development.

Definition of Key Concepts

A clear conceptual framework is essential for analyzing organizational commitment and its determinants. Accordingly, this section outlines the key concepts underpinning the study.

Organizational Commitment

Organizational commitment is commonly conceptualized as a psychological state that characterizes the relationship between an employee and an organization, influencing the decision to remain a member of that organization. Early definitions by Porter and Smith emphasized commitment as a positive attitudinal orientation toward the organization, reflecting identification with its goals and values. Subsequent contributions by O'Reilly and Chatman further highlighted the psychological bond that integrates individuals into organizational structures and norms.

Building on these foundational perspectives, Meyer and Allen (1991; 1993) conceptualized organizational commitment as a multidimensional construct encompassing affective, continuance, and normative components. Within this framework, commitment reflects the degree to which individuals align their values, beliefs, and goals with those of the organization, as well as their willingness to exert effort on its behalf and maintain long-term membership. Operationally, organizational commitment can be understood as a dynamic psychological attachment that manifests in behaviors such as loyalty, engagement, and sustained organizational participation.

Dimensions of Organizational Commitment

According to the widely accepted three-component model proposed by Allen and Meyer (1990), organizational commitment comprises three distinct but interrelated dimensions:

- **Affective Commitment:** Affective commitment refers to the emotional attachment and identification that an individual develops with the organization. Employees with strong affective commitment remain with the organization because they *want* to, driven by a sense of belonging and alignment with organizational values.
- **Continuance Commitment:** Continuance commitment reflects an individual's awareness of the costs associated with leaving the organization. This dimension is based on rational and economic considerations, where employees remain because they *need* to, due to perceived investments, job security, or lack of alternative opportunities.
- **Normative Commitment:** Normative commitment represents a sense of moral obligation to remain with the organization. Employees exhibiting this form of commitment stay because they *ought* to, guided by internalized norms, values, or a perceived sense of duty.

Together, these dimensions provide a comprehensive framework for understanding the complex nature of employee attachment and its implications for organizational outcomes.

The Organization

The concept of the organization has evolved significantly since the mid-twentieth century, emerging as a central focus of scholarly inquiry within the fields of management, sociology, and organizational theory. Early conceptualizations emphasized the structural and functional dimensions of organizations, viewing them as coordinated systems designed to achieve predefined objectives through the efficient allocation of resources.

One of the foundational perspectives defines the organization as a stable and purpose-oriented collective of individuals, structured to deliver goods or services through the integration of technical and financial resources. This view highlights the instrumental role of organizations in facilitating economic exchange and achieving operational efficiency. Complementing this perspective, classical organizational theorists conceptualized organizations as systems of rational coordination, wherein activities are systematically organized through division of labor, hierarchical authority, and clearly defined roles. Such a framework underscores the importance of formal structures in ensuring coherence, accountability, and goal attainment.

A more dynamic interpretation is provided by Herbert Simon, who conceptualized organizations as complex networks of communication and decision-making processes. From this perspective, organizations are not merely structural entities but interactive systems in which information flows and interpersonal relationships shape individual behavior and organizational outcomes. This approach emphasizes the cognitive and behavioral dimensions of organizational functioning, highlighting the role of communication in guiding decision-making and organizational adaptation.

Building upon these theoretical foundations, an organization can be operationally defined as an integrated system of coordinated activities, resources, and relationships, designed to achieve specific objectives within a dynamic internal and external environment. This integrative perspective acknowledges both the structural and behavioral dimensions of organizations, providing a comprehensive framework for analyzing organizational processes and outcomes.

Study Methodology

This study adopts a quantitative research design grounded in a comparative-descriptive approach to examine the relationships between selected variables and organizational commitment. The choice of this methodological framework is informed by its suitability for identifying patterns, differences, and associations across groups within a defined population.

The comparative dimension of the methodology enables systematic analysis of variations in organizational commitment across key demographic and professional variables, including age, gender, educational background, and professional experience. By facilitating direct comparisons between subgroups, this approach provides deeper insights into how individual and contextual factors influence employee attitudes and behaviors.

The descriptive component complements this analysis by offering a comprehensive overview of the characteristics of the study sample and the distribution of responses across key variables. It allows for the identification of trends and patterns that reflect the current state of organizational commitment within the institution. Together, these methodological components provide a robust analytical framework capable of generating empirically grounded and theoretically meaningful conclusions.

Research Instrument

Data for this study were collected using a structured questionnaire designed to capture both demographic information and measures of organizational commitment. The instrument was carefully developed to ensure clarity, relevance, and alignment with the study's objectives.

The questionnaire consists of two main sections. The first section gathers information on personal and job-related variables, including age, gender, marital status, educational level, departmental affiliation, and professional experience. The second

section measures organizational commitment using a set of items based on established theoretical constructs. The structured format of the questionnaire ensures consistency in responses and enhances the reliability and validity of the collected data.

Structural Equation Model of Organizational Commitment

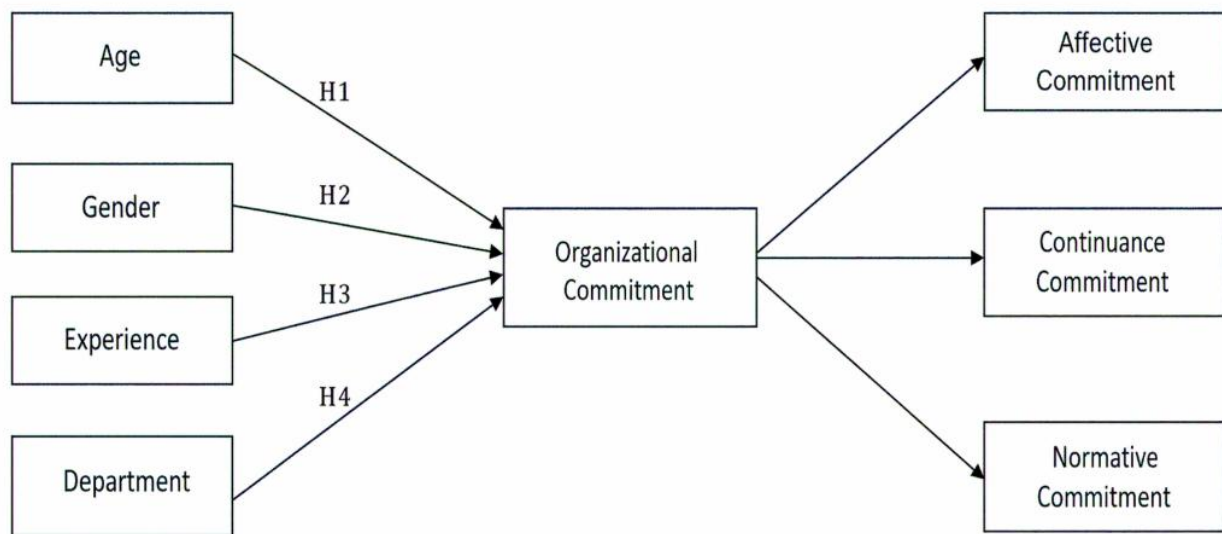


Figure 1. Conceptual Research Model of Organizational Commitment: Effects of Demographic and Job-Related Factors on Commitment Dimensions. (Source: Developed by the authors based on Meyer and Allen (1991)).

Population and Sample

The study population comprises all employees of the Port of Djen Djen, totaling 110 individuals. A purposive sampling technique was employed to select participants who are directly relevant to the research objectives and capable of providing meaningful insights into organizational commitment.

A pilot study was initially conducted on a subset of participants to assess the reliability and validity of the research instrument. Following this preliminary validation, the questionnaire was distributed to the full sample. Out of the 110 distributed questionnaires, 89 were returned, and 76 were deemed valid for analysis, representing a response rate of approximately 69.09%. This sample provides a sufficiently representative basis for conducting statistical analysis and drawing reliable conclusions.

Questionnaire Design

The measurement of organizational commitment in this study is based on the well-established three-component model developed by Allen and Meyer (1990), which distinguishes between affective, continuance, and normative commitment. This model is widely recognized for its conceptual robustness and empirical validity in organizational research.

To operationalize this framework, the questionnaire was structured to include 15 items, distributed equally across the three dimensions of organizational commitment. Each dimension comprises five items designed to capture the emotional, calculative, and normative aspects of employee attachment to the organization.

- The affective commitment dimension assesses emotional attachment and identification with the organization.
- The continuance commitment dimension evaluates the perceived costs associated with leaving the organization.
- The normative commitment dimension measures the sense of obligation to remain within the organization.

This structured design ensures comprehensive coverage of the construct and facilitates a nuanced analysis of the different dimensions of organizational commitment.

Measurement Structure and Scaling

The measurement of organizational commitment in this study is grounded in the three-component model developed by Allen and Meyer (1990), which conceptualizes commitment as comprising affective, continuance, and normative dimensions. To operationalize this framework, the questionnaire was structured into three distinct subscales, each capturing a specific dimension of organizational commitment.

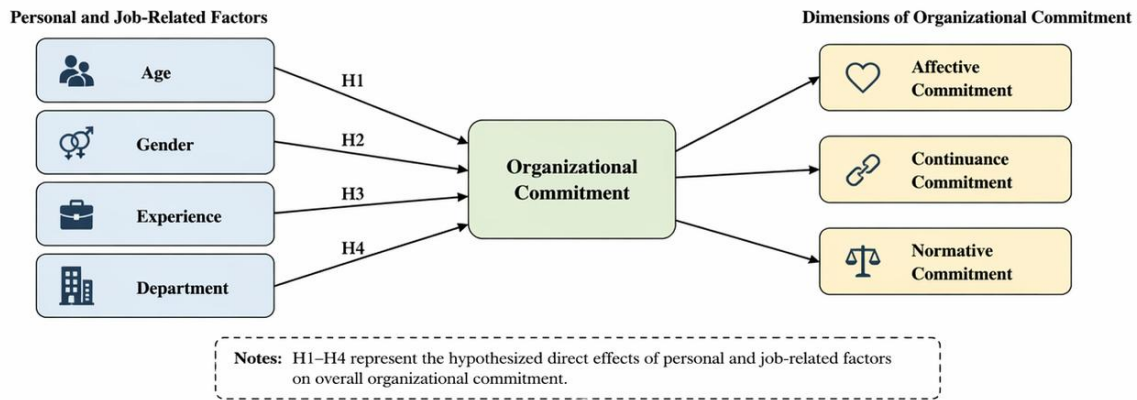


Figure 2. Model of Organizational Commitment: Effects of Personal and Job-Related Factors on Commitment Dimensions. **Source:** Developed by the authors based on Meyer and Allen (1991).

This figure presents the conceptual research model developed for the study. It illustrates the hypothesized effects of personal and job-related factors, including age, gender, professional experience, and departmental affiliation, on overall organizational commitment, which is subsequently reflected in its three dimensions: affective commitment, continuance commitment, and normative commitment.

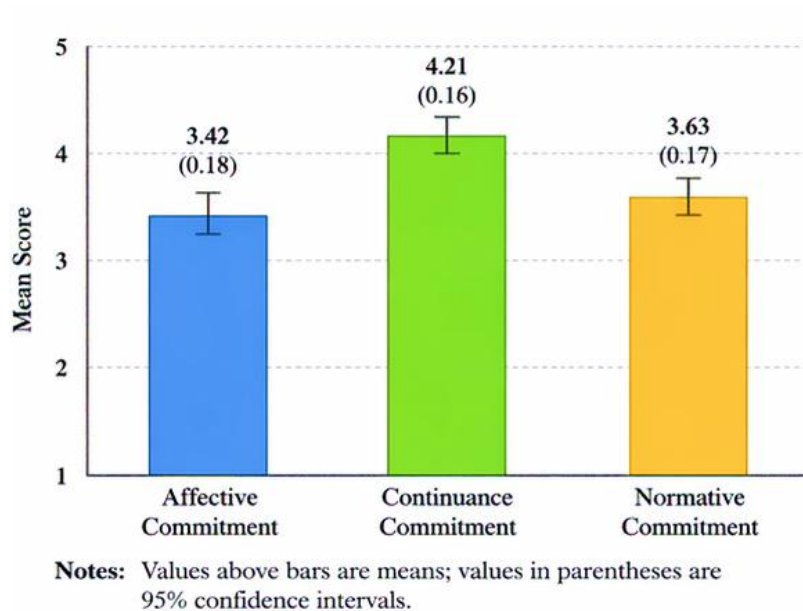


Figure 3. Comparative Mean Scores of the Three Dimensions of Organizational Commitment (Source: Developed by the authors based on Meyer and Allen (1991).)

Each dimension is measured using five items, resulting in a total of fifteen statements designed to comprehensively assess the multidimensional nature of employee commitment. This structured allocation ensures balanced representation across the three dimensions and enhances the construct validity of the measurement instrument.

Table 1. Structure of Organizational Commitment Dimensions

| Dimension of Organizational Commitment | Item Numbers |
|--|--------------|
| Affective Commitment | 1–5 |
| Continuance Commitment | 6–10 |
| Normative Commitment | 11–15 |

Source: Developed by the authors based on the model of Allen and Meyer (1990).

To quantify respondents’ perceptions, a five-point Likert scale was employed, which is widely recognized for its reliability and suitability in behavioral and organizational research. The scale captures varying degrees of agreement, allowing for nuanced measurement of attitudes and perceptions.

Table 2. Five-Point Likert Scale Used in the Study

| Response Category | Score |
|-------------------|-------|
| Strongly Agree | 1 |
| Agree | 2 |
| Neutral | 3 |
| Disagree | 4 |
| Strongly Disagree | 5 |

Source: Adapted from Likert (1971).

Ensuring the validity of the measurement instrument is a critical step in empirical research. In this study, the validity of the questionnaire was assessed through multiple complementary approaches, aimed at confirming both its conceptual adequacy and empirical robustness.



Notes: Higher scores indicate stronger commitment.

Figure 4. Organizational Commitment Dimensions by Professional Experience (Source: Developed by the authors based on Meyer and Allen (1991)).

Content validity was established through expert evaluation, whereby the questionnaire was reviewed by a panel of specialists in organizational behavior and human resource management. The experts assessed the relevance, clarity, and comprehensiveness of each item in relation to the constructs being measured.

Based on their feedback, minor revisions were implemented to improve the wording, eliminate ambiguity, and ensure alignment with the study’s objectives. This iterative refinement process enhanced the instrument’s capacity to accurately capture the dimensions of organizational commitment, thereby strengthening its overall content validity.

Construct Validity and Internal Consistency

Construct validity was examined through the assessment of internal consistency, using Pearson correlation coefficients to evaluate the relationship between individual items and their respective dimensions. This approach ensures that each item contributes meaningfully to the measurement of its underlying construct.

The results, presented in Table 3, indicate that all correlation coefficients are statistically significant ($p < 0.05$), confirming that each item is strongly associated with its corresponding dimension. These findings provide empirical support for the validity of the measurement structure.

Table 3. Item-to-Dimension Correlation

| Dimension | Number of Items | Correlation Significance |
|------------------------|-----------------|--------------------------|
| Affective Commitment | 5 | Significant (p < 0.05) |
| Continuance Commitment | 5 | Significant (p < 0.05) |
| Normative Commitment | 5 | Significant (p < 0.05) |

Source: Calculated by the authors using SPSS.

The statistically significant correlations across all dimensions indicate a high level of internal coherence among the items, confirming that the instrument reliably captures the intended constructs. This level of consistency supports the use of the questionnaire as a valid tool for analyzing organizational commitment within the study context.

Item-Dimension Correlation Analysis

To further assess the construct validity of the measurement instrument, an item-dimension correlation analysis was conducted using Pearson's correlation coefficient. This procedure evaluates the extent to which each questionnaire item is associated with its corresponding dimension of organizational commitment.

The results presented in Table 4 indicate that all items demonstrate statistically significant positive correlations with their respective dimensions at the 0.01 level (p < 0.01). The correlation coefficients range from 0.606 to 0.873, reflecting moderate to high levels of internal consistency across all items.

Notably, the highest correlations were observed in items related to emotional attachment and perceived costs of leaving the organization, suggesting strong coherence within the affective and continuance commitment dimensions. These findings confirm that the measurement items are well-aligned with their theoretical constructs and provide robust support for the validity of the instrument.

Table 4. Item-Dimension Correlation Coefficients

| No. | Item Description | Pearson Correlation (r) | Significance (p-value) |
|-----|--|-------------------------|------------------------|
| 1 | I would be happy to spend the rest of my professional life at this institution | 0.685 | 0.000** |
| 2 | I perceive institutional problems as my personal concerns | 0.835 | 0.000** |
| 3 | I feel emotionally and psychologically attached to the institution | 0.862 | 0.000** |
| 4 | I enjoy discussing my work outside working hours | 0.679 | 0.000** |
| 5 | I perceive myself as an integral member of the institutional team | 0.680 | 0.000** |
| 6 | Remaining in my job is more a necessity than a personal desire | 0.635 | 0.000** |
| 7 | I perceive limited alternative employment opportunities outside this institution | 0.609 | 0.000** |
| 8 | My career aspirations may not be fulfilled in other institutions | 0.663 | 0.000** |
| 9 | Leaving the institution would result in significant personal costs | 0.873 | 0.000** |
| 10 | Remaining in my current position will benefit me in the future | 0.606 | 0.000** |
| 11 | I feel a moral obligation to remain with the institution | 0.678 | 0.000** |
| 12 | Leaving the institution would be inappropriate, even with better opportunities | 0.873 | 0.000** |
| 13 | I would feel guilty if I left the institution | 0.828 | 0.000** |
| 14 | I remain due to strong relationships with colleagues | 0.723 | 0.000** |
| 15 | I feel indebted to the institution for its impact on my life | 0.739 | 0.000** |

Note: p < 0.01 indicates statistical significance at the 1% level. *Source: Calculated by the authors using SPSS.*

The results confirm that all items are statistically significant and positively correlated with their respective dimensions, indicating strong internal coherence and construct validity. The relatively high correlation coefficients, particularly those exceeding 0.80, suggest that several items are highly representative of their underlying constructs.

Furthermore, the consistency across affective, continuance, and normative dimensions demonstrates that the measurement instrument effectively captures the multidimensional nature of organizational commitment as conceptualized by Allen and

Meyer (1990). These findings provide empirical support for the reliability and validity of the questionnaire, reinforcing its suitability for subsequent statistical analysis.

Construct Validity

In addition to content and internal consistency validity, the construct validity of the questionnaire was rigorously evaluated to ensure that the instrument accurately measures the theoretical concept of organizational commitment. Construct validity refers to the extent to which a measurement tool effectively captures the latent construct it is intended to assess.

To establish construct validity, Pearson correlation coefficients were calculated between each dimension (axis) of organizational commitment and the overall questionnaire score. This procedure assesses the degree to which each dimension contributes to the overarching construct, thereby confirming the coherence between subscales and the global measure.

The results, presented in Table 5, indicate that all dimensions are strongly and positively correlated with the total score, with correlation coefficients ranging from 0.726 to 0.899. All correlations are statistically significant at the 0.01 level ($p < 0.01$), demonstrating that each dimension is meaningfully associated with the overall construct of organizational commitment.

These findings provide robust empirical support for the construct validity of the instrument, confirming that the questionnaire effectively captures the multidimensional structure of organizational commitment as conceptualized in the theoretical framework. The strong correlations observed further indicate that the dimensions are internally coherent while maintaining their distinct conceptual contributions.

Table 5. Correlation Between Organizational Commitment Dimensions and Total Score

| No. | Dimension | Pearson Correlation (r) | Significance (p-value) |
|-----|------------------------|-------------------------|------------------------|
| 1 | Affective Commitment | 0.899 | 0.000** |
| 2 | Continuance Commitment | 0.726 | 0.000** |
| 3 | Normative Commitment | 0.895 | 0.000** |

Note: $p < 0.01$ indicates statistical significance at the 1% level.

Source: Calculated by the authors using SPSS.

The reliability of the measurement instrument was assessed using Cronbach’s alpha coefficient, a widely accepted indicator of internal consistency in social science research. Cronbach’s alpha evaluates the extent to which items within a scale are interrelated, thereby reflecting the degree to which they measure a common underlying construct.

The results of the reliability analysis, presented in Table 6, demonstrate that all dimensions of organizational commitment exhibit acceptable to high levels of internal consistency. The Cronbach’s alpha coefficients range from 0.635 to 0.828 across individual dimensions, while the overall scale achieves a coefficient of 0.881.

According to established methodological standards, alpha values above 0.70 are considered acceptable, while values above 0.80 indicate strong reliability. Although the continuance commitment dimension shows a slightly lower coefficient (0.635), it remains within an acceptable range for exploratory research. The overall high reliability coefficient confirms that the questionnaire is a stable and consistent instrument for measuring organizational commitment.

Table 6. Cronbach’s Alpha Coefficients for Organizational Commitment Dimensions

| Dimension | Number of Items | Cronbach’s Alpha |
|------------------------|-----------------|------------------|
| Affective Commitment | 5 | 0.807 |
| Continuance Commitment | 5 | 0.635 |
| Normative Commitment | 5 | 0.828 |
| Overall Scale | 15 | 0.881 |

Source: Calculated by the authors using SPSS.

The results confirm that the measurement instrument demonstrates strong psychometric properties. The high correlations between dimensions and the overall scale support the theoretical coherence of the construct, while the Cronbach’s alpha values indicate satisfactory internal consistency across all dimensions.

Importantly, the slightly lower reliability observed in the continuance commitment dimension may reflect the inherently complex and context-dependent nature of this construct, which is often influenced by external constraints and perceived costs rather than intrinsic motivation. This observation aligns with prior literature suggesting variability in the measurement stability of continuance commitment.

Overall, the combined evidence from construct validity and reliability analyses provides strong support for the robustness of the measurement instrument, ensuring the credibility of subsequent statistical analyses and empirical findings.

Reliability Interpretation

The results presented in Table 6 demonstrate that the organizational commitment scale exhibits a high level of internal consistency, as evidenced by a Cronbach’s alpha coefficient of 0.881. This value exceeds the widely accepted threshold of 0.80, indicating excellent reliability and suggesting that the measurement items are strongly interrelated and consistently capture the underlying construct.

Such a high coefficient reflects the robustness of the instrument and confirms that the items across the three dimensions— affective, continuance, and normative commitment—operate cohesively in measuring organizational commitment. The reliability coefficient also implies that the instrument is stable and capable of producing consistent results across different samples within similar contexts.

Overall, these findings provide strong empirical support for the reliability of the questionnaire, affirming its suitability for use in subsequent statistical analyses. The high internal consistency enhances confidence in the validity of the data and ensures that the conclusions drawn from the study are methodologically sound and scientifically credible.

Statistical Analysis Procedures

The collected data were analyzed using SPSS (Version 20), a widely recognized statistical software in social science research. Prior to analysis, the dataset was subjected to data screening and cleaning procedures to ensure accuracy, completeness, and consistency.

A range of statistical techniques was employed to address the research objectives. Descriptive statistics, including frequencies and percentages, were used to summarize the distribution of demographic variables and provide an overview of the sample characteristics. Measures of central tendency (mean) and dispersion (standard deviation) were calculated to describe the distribution of responses across questionnaire items and dimensions.

To examine relationships between variables, Pearson’s correlation coefficient was utilized to assess the strength and direction of linear associations among the dimensions of organizational commitment and relevant independent variables. Furthermore, inferential statistical tests were conducted to evaluate group differences. A one-way analysis of variance (ANOVA) was applied to compare mean differences across multiple groups (e.g., age categories), while independent sample t-tests were used to assess differences between two groups (e.g., gender).

Collectively, these analytical techniques provided a comprehensive and methodologically rigorous framework for interpreting the data, ensuring that the study’s findings are statistically robust and aligned with established research standards.

Sample Characteristics

A detailed examination of the sample characteristics is essential for contextualizing the empirical findings and assessing the representativeness of the data. This section presents the demographic profile of the study participants, with particular emphasis on age distribution, which constitutes a key variable in the analysis of organizational commitment.

The age distribution of the sample, presented in Table 7, indicates a clear concentration of participants within the middle-aged categories. The largest proportion of respondents (43.4%) falls within the 41–50 age group, suggesting that the workforce is predominantly composed of experienced individuals in a mature stage of their professional careers. This demographic profile is indicative of a workforce characterized by accumulated expertise and organizational familiarity.

The second-largest group comprises participants aged 31–40 (30.3%), representing individuals likely in the growth and consolidation phase of their careers. Participants aged 51 and above account for 15.8% of the sample, reflecting the presence of senior employees with extensive professional experience. In contrast, the youngest age group (10–20 years) represents only 10.5% of the sample, indicating a relatively limited presence of early-career employees.

This distribution suggests that the organizational workforce is heavily weighted toward mid- and late-career professionals, which may have important implications for understanding patterns of organizational commitment.

Table 7. Distribution of the Sample by Age

| Age Group | Frequency | Percentage (%) |
|--------------|-----------|----------------|
| 10–20 | 8 | 10.5 |
| 31–40 | 23 | 30.3 |
| 41–50 | 33 | 43.4 |
| 51 and above | 12 | 15.8 |
| Total | 76 | 100.0 |

Source: Calculated by the authors using SPSS.

The gender composition of the sample is presented in Table 8. The results indicate a notable gender imbalance, with male respondents constituting the majority of the study population. Specifically, 51 male participants represent 67.1% of the total sample, while female participants account for 32.9% (n = 25).

Table 8. Distribution of the Sample by Gender

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male | 51 | 67.1 |
| Female | 25 | 32.9 |
| Total | 76 | 100.0 |

Source: Calculated by the authors using SPSS.

This distribution reflects the gender structure of the workforce within the Port of Djen Djen, where male employees appear to dominate operational and administrative roles. Such an imbalance is consistent with patterns observed in industrial and port-related sectors, which traditionally exhibit lower female participation.

From an analytical perspective, gender constitutes a critical variable in organizational behavior research, as it may influence perceptions of job roles, career progression, and organizational attachment. The observed disparity in representation suggests that gender-based differences in organizational commitment may emerge, potentially shaped by varying professional experiences, role expectations, and socio-cultural factors.

Therefore, incorporating gender as an analytical variable enables a more nuanced examination of organizational commitment, allowing the study to explore whether statistically significant differences exist between male and female employees. This contributes to a deeper understanding of how demographic characteristics influence employee attitudes and organizational engagement. The distribution of respondents across organizational departments is presented in Table 9. This breakdown provides insight into the functional composition of the workforce and allows for the analysis of organizational commitment across different operational units.

Table 9. Distribution of the Sample by Department

| Department | Frequency | Percentage (%) |
|--|-----------|----------------|
| General Directorate | 6 | 7.9 |
| Human Resources | 8 | 10.5 |
| Port Authority / Operations Management | 33 | 43.4 |
| Finance and Accounting | 3 | 3.9 |
| Operations | 6 | 7.9 |
| Works and Maintenance | 16 | 21.1 |
| Studies and Development | 4 | 5.3 |
| Total | 76 | 100.0 |

Source: Calculated by the authors using SPSS.

The results indicate that the largest proportion of respondents (43.4%) is concentrated within the Port Authority / Operations Management department. This reflects the central operational role of this unit in managing core port activities and suggests a higher staffing concentration in this area. The Works and Maintenance department represents the second-largest group (21.1%), highlighting its importance in ensuring operational continuity and infrastructure reliability.

Other departments, including Human Resources (10.5%) and the General Directorate (7.9%), contribute moderately to the sample, while Finance and Accounting (3.9%) and Studies and Development (5.3%) are less represented. This variation in departmental representation reflects the organizational structure of the institution and provides a diverse basis for analysis.

From an analytical standpoint, departmental affiliation is a critical organizational variable that may significantly influence levels of organizational commitment. Differences in job roles, working conditions, managerial practices, and departmental cultures can lead to variations in employee attitudes and engagement levels. The inclusion of multiple departments in the sample enhances the study's ability to capture these variations and supports a more comprehensive understanding of organizational commitment across functional units.

Distribution of the Sample by Professional Experience

The distribution of respondents according to professional experience is presented in Table 10. This variable is particularly important in organizational behavior research, as professional experience is often associated with variations in attitudes, job stability perceptions, and organizational attachment.

Table 10. Distribution of the Sample by Professional Experience

| Years of Experience | Frequency | Percentage (%) |
|---------------------|-----------|----------------|
| 1-5 years | 3 | 3.9 |
| 5-10 years | 6 | 7.9 |
| 10-15 years | 14 | 18.4 |
| 15-20 years | 27 | 35.5 |
| 20-25 years | 18 | 23.7 |
| 26 years and above | 8 | 10.5 |
| Total | 76 | 100.0 |

Source: Calculated by the authors using SPSS.

The results indicate a strong concentration of respondents within the mid- to late-career stages. The largest group (35.5%) falls within the 15–20 years of experience category, followed by those with 20–25 years of experience (23.7%). This suggests that the workforce is predominantly composed of experienced employees who have likely developed substantial organizational knowledge and professional stability.

Employees with 10–15 years of experience (18.4%) represent a significant portion of the sample, reflecting individuals in the consolidation phase of their careers. In contrast, early-career employees (1–10 years of experience) constitute a relatively small proportion of the sample (11.8% combined), indicating limited representation of newer workforce entrants.

From an analytical perspective, this distribution suggests that organizational commitment in this context may be influenced by long-term employment relationships, accumulated organizational investments, and career stability considerations. Employees with extended tenure are more likely to exhibit higher levels of continuance and normative commitment due to perceived costs of leaving and a stronger sense of organizational obligation.

Results Analysis

This section presents a systematic analysis of the empirical findings, focusing on the relative prominence of the three dimensions of organizational commitment—*affective*, *continuance*, and *normative*—based on the responses of the study participants.

Analysis of Organizational Commitment Dimensions

The results, summarized in Table 11, reveal notable differences in the relative importance of the three dimensions of organizational commitment.

Continuance commitment emerged as the most dominant dimension, with the highest mean score ($M = 3.41$). This indicates that respondents’ attachment to the organization is primarily driven by pragmatic considerations, such as job security, financial stability, and perceived costs associated with leaving the organization. This finding suggests that employees remain within the organization largely due to necessity rather than intrinsic motivation.

Normative commitment ranked second, with a moderate mean score ($M = 3.03$), reflecting a moderate sense of moral obligation and duty toward the organization. This dimension indicates that employees feel a certain level of responsibility to remain with the institution, although it is not the primary determinant of their organizational attachment.

Affective commitment recorded the lowest mean score ($M = 2.87$), indicating a comparatively weaker level of emotional attachment and identification with the organization. This suggests that employees’ psychological and emotional engagement with the organization is less pronounced than their calculative and normative motivations.

Table 11. Mean Scores of Organizational Commitment Dimensions

| Dimension | Mean (M) | Interpretation Level |
|------------------------|----------|----------------------|
| Continuance Commitment | 3.41 | High |
| Normative Commitment | 3.03 | Moderate |
| Affective Commitment | 2.87 | Moderate |

Source: Calculated by the authors using SPSS.

Descriptive Analysis of Organizational Commitment Dimensions

The comparative analysis of the three dimensions of organizational commitment is presented in Table 12. The results reveal clear differences in the relative prominence of each dimension.

Table 12. Mean Scores and Ranking of Organizational Commitment Dimensions

| Dimension | Mean (M) | Rank |
|------------------------|----------|------|
| Continuance Commitment | 3.41 | 1 |
| Normative Commitment | 3.03 | 2 |
| Affective Commitment | 2.87 | 3 |

Source: Calculated by the authors using SPSS.

The findings indicate that continuance commitment is the most dominant dimension, suggesting that employees' attachment to the organization is primarily driven by pragmatic considerations, such as job security and perceived costs of leaving. Normative commitment occupies a secondary position, reflecting a moderate sense of obligation, while affective commitment ranks lowest, indicating comparatively weaker emotional attachment.

From a theoretical perspective, this pattern aligns with research suggesting that in public-sector or stability-oriented environments, instrumental motivations often outweigh emotional engagement.

To examine differences in organizational commitment across age groups, a one-way analysis of variance (ANOVA) was conducted. The results are presented in Table 13.

Table 13. ANOVA Results for Organizational Commitment by Age

| Dimension | Source of Variance | Sum of Squares | df | Mean Square | F-value | p-value |
|------------------------|--------------------|----------------|----|-------------|---------|---------|
| Affective Commitment | Between Groups | 4.645 | 3 | 1.548 | 2.008 | 0.012* |
| | Within Groups | 55.521 | 72 | 0.771 | | |
| | Total | 60.166 | 75 | | | |
| Continuance Commitment | Between Groups | 1.613 | 3 | 0.538 | 1.042 | 0.379 |
| | Within Groups | 37.153 | 72 | 0.516 | | |
| | Total | 38.766 | 75 | | | |
| Normative Commitment | Between Groups | 3.197 | 3 | 1.066 | 1.059 | 0.372 |
| | Within Groups | 72.449 | 72 | 1.006 | | |
| | Total | 75.646 | 75 | | | |

Note: $p < 0.05$ indicates statistical significance.

Source: Calculated by the authors using SPSS.

The ANOVA results indicate that statistically significant differences exist only in the affective commitment dimension across age groups ($p = 0.012 < 0.05$). This suggests that emotional attachment to the organization varies meaningfully depending on employees' age.

In contrast, no statistically significant differences were found for continuance or normative commitment, indicating that pragmatic and obligation-based attachments remain relatively stable across age categories.

From an analytical perspective, this finding implies that age primarily influences emotional engagement rather than instrumental or normative motivations, highlighting the importance of tailoring engagement strategies to different career stages.

To assess gender-based differences in organizational commitment, an independent samples t-test was conducted. The results are summarized in Table 14.

Table 14. T-Test Results for Organizational Commitment by Gender

| Dimension | Group | N | Mean (M) | SD | t-value | df | p-value |
|------------------------|--------|----|----------|------|---------|----|---------|
| Affective Commitment | Male | 51 | 2.88 | 0.79 | 0.31 | 74 | 0.976 |
| | Female | 25 | 2.87 | 1.00 | | | |
| Continuance Commitment | Male | 51 | 3.20 | 0.63 | -2.22 | 74 | 0.029* |

| | | | | | | | |
|----------------------|--------|----|------|------|-------|----|-------|
| | Female | 25 | 3.56 | 0.76 | | | |
| Normative Commitment | Male | 51 | 2.84 | 0.88 | -1.54 | 74 | 0.120 |
| | Female | 25 | 3.20 | 1.09 | | | |

Note: $p < 0.05$ indicates statistical significance.
 Source: Calculated by the authors using SPSS.

The results indicate that gender differences are statistically significant only for the continuance commitment dimension ($p = 0.029 < 0.05$). Female employees exhibit higher levels of continuance commitment compared to their male counterparts, suggesting a stronger perception of the costs associated with leaving the organization.

No significant differences were observed in affective or normative commitment, indicating that emotional attachment and moral obligation are relatively consistent across gender groups.

Interpretation of Gender-Based Differences

The results reported in Table 14 indicate that the F-test values are not statistically significant across all three dimensions of organizational commitment ($p > 0.05$), suggesting overall homogeneity between male and female respondents. This implies that gender does not exert a generalized influence on organizational commitment when considered at an aggregate level.

However, the independent samples t-test reveals a statistically significant difference in the continuance commitment dimension ($p = 0.029 < 0.05$), with female respondents reporting higher mean scores compared to their male counterparts. This finding suggests that female employees exhibit stronger calculative attachment to the organization, likely driven by perceived costs associated with leaving, such as job stability, financial security, or limited alternative opportunities.

In contrast, no statistically significant differences were observed in affective or normative commitment ($p > 0.05$), indicating that emotional attachment and moral obligation toward the organization are relatively consistent across gender groups. These findings highlight the selective influence of gender on specific dimensions of commitment rather than its overall structure.

Analysis of Organizational Commitment by Department

To examine differences in organizational commitment across functional units, a one-way ANOVA was conducted. The results are presented in Table 15.

Table 15. ANOVA Results for Organizational Commitment by Department

| Dimension | Source of Variance | Sum of Squares | df | Mean Square | F-value | p-value |
|------------------------|--------------------|----------------|----|-------------|---------|---------|
| Affective Commitment | Between Groups | 8.401 | 6 | 1.400 | 1.866 | 0.099 |
| | Within Groups | 51.766 | 69 | 0.750 | | |
| | Total | 60.166 | 75 | | | |
| Continuance Commitment | Between Groups | 5.340 | 6 | 0.890 | 2.837 | 0.015* |
| | Within Groups | 33.426 | 69 | 0.484 | | |
| | Total | 38.766 | 75 | | | |
| Normative Commitment | Between Groups | 7.347 | 6 | 1.225 | 1.237 | 0.298 |
| | Within Groups | 68.299 | 69 | 0.990 | | |
| | Total | 75.646 | 75 | | | |

Note: $p < 0.05$ indicates statistical significance.
 Source: Calculated by the authors using SPSS.

The results indicate that statistically significant differences across departments are observed only in the continuance commitment dimension ($p = 0.015 < 0.05$). This finding suggests that employees' perceptions of the costs associated with leaving the organization vary depending on their departmental affiliation.

In contrast, no significant differences were found in affective or normative commitment ($p > 0.05$), indicating that emotional attachment and moral obligation are relatively stable across different functional units.

From an analytical standpoint, this pattern implies that departmental context influences instrumental aspects of commitment, potentially due to variations in job roles, working conditions, career opportunities, or resource allocation across departments.

To assess the effect of professional experience on organizational commitment, a one-way ANOVA was conducted, and the results are presented in Table 16.

Table 16. ANOVA Results for Organizational Commitment by Professional Experience

| Dimension | Source of Variance | Sum of Squares | df | Mean Square | F-value | p-value |
|------------------------|--------------------|----------------|----|-------------|---------|---------|
| Affective Commitment | Between Groups | 1.714 | 2 | 0.365 | 2.441 | 0.032* |
| | Within Groups | 58.452 | 73 | 0.827 | | |
| | Total | 60.166 | 75 | | | |
| Continuance Commitment | Between Groups | 0.074 | 2 | 0.575 | 1.120 | 0.354 |
| | Within Groups | 38.693 | 73 | 0.514 | | |
| | Total | 38.766 | 75 | | | |
| Normative Commitment | Between Groups | 1.163 | 2 | 0.502 | 2.284 | 0.048* |
| | Within Groups | 74.484 | 73 | 0.037 | | |
| | Total | 75.646 | 75 | | | |

Note: $p < 0.05$ indicates statistical significance.
Source: Calculated by the authors using SPSS.

The findings reveal that professional experience has a statistically significant effect on both affective commitment ($p = 0.032$) and normative commitment ($p = 0.048$). This indicates that employees' emotional attachment and sense of obligation toward the organization vary across different levels of professional experience.

In contrast, no significant differences were found in continuance commitment ($p > 0.05$), suggesting that perceived costs of leaving the organization remain relatively consistent regardless of experience level.

From a theoretical perspective, these results suggest that career progression influences psychological and normative aspects of commitment more strongly than instrumental considerations. Employees with greater experience may develop stronger emotional bonds and a heightened sense of responsibility toward the organization, reflecting deeper organizational integration over time.

Interpretation of ANOVA Results for Professional Experience

The analysis of variance results reported in Table 16 indicate that statistically significant differences exist in both affective commitment ($p = 0.032$) and normative commitment ($p = 0.048$) across different levels of professional experience. These findings confirm that the corresponding F-values are statistically significant, demonstrating that employees' emotional attachment and sense of obligation toward the organization vary meaningfully depending on their tenure.

This result suggests that professional experience plays a critical role in shaping the psychological and normative dimensions of organizational commitment. Employees with longer tenure are more likely to develop stronger emotional bonds and a heightened sense of responsibility toward the organization, reflecting deeper organizational integration and accumulated institutional knowledge.

DISCUSSION AND INTERPRETATION OF HYPOTHESES

The findings of this study provide empirical support for the main hypothesis, indicating that organizational commitment is significantly influenced by key demographic and organizational variables, including age, gender, departmental affiliation, and professional experience.

However, the results also reveal that these effects are dimension-specific, meaning that different variables influence distinct components of organizational commitment rather than the construct as a whole. This reinforces the multidimensional nature of organizational commitment as conceptualized by Allen and Meyer (1990), and highlights the importance of examining its components separately.

Discussion of the First Sub-Hypothesis (Age)

The results indicate that age has a statistically significant effect on affective commitment, suggesting that emotional attachment to the organization varies across different age groups. This finding supports the argument that age functions as a key antecedent of organizational commitment, particularly in shaping emotional engagement and identification with organizational values.

These results are consistent with prior research indicating that age is positively associated with affective commitment, as older employees tend to develop stronger psychological attachment due to accumulated experience, stability, and long-term organizational involvement. Furthermore, the findings align with studies suggesting that personal characteristics, including age, play a significant role in influencing organizational attitudes and behaviors.

However, the present findings differ from studies that report a broader influence of age across all dimensions of commitment. The absence of significant effects on continuance and normative commitment in this study suggests that age may primarily influence emotional attachment rather than instrumental or obligation-based commitment, highlighting the context-dependent nature of this relationship.

Discussion of the Second Sub-Hypothesis (Gender)

The analysis reveals that gender differences are statistically significant only in the continuance commitment dimension, with female employees demonstrating higher levels of continuance commitment compared to male employees. This suggests that female respondents are more likely to remain in the organization due to perceived costs associated with leaving, such as job security, stability, and career continuity.

This finding can be interpreted within a broader socio-organizational context, where female employees may place greater emphasis on employment stability and long-term security. It also reflects the influence of structural and contextual factors that shape career decision-making differently across gender groups.

The results are consistent with some prior studies that report significant gender-based differences in organizational commitment, particularly in its instrumental dimension. However, they contrast with research that finds no significant gender effects or reports higher commitment levels among male employees. These discrepancies further highlight that the relationship between gender and organizational commitment is complex and context-specific, influenced by organizational structure, cultural norms, and labor market conditions.

Discussion of the Third Sub-Hypothesis

The findings indicate that departmental affiliation significantly affects continuance commitment, suggesting that employees' perceptions of the costs of leaving the organization vary across functional units. This may be attributed to differences in job characteristics, working conditions, career advancement opportunities, and resource availability across departments.

From a theoretical standpoint, this result supports the argument that organizational context and job-related factors play a crucial role in shaping instrumental commitment. Employees in operational or core departments may perceive higher switching costs due to specialized skills, organizational dependency, or limited external opportunities.

While the findings align with studies emphasizing the role of job characteristics in influencing organizational commitment, they also suggest that the impact is more pronounced for continuance commitment than for affective or normative dimensions. This highlights the need to differentiate between structural and psychological determinants of commitment when analyzing organizational behavior.

Discussion of the Fourth Sub-Hypothesis

The findings indicate that professional experience exerts a statistically significant influence on both affective and normative commitment, confirming that employees' emotional attachment and sense of organizational obligation vary across different levels of tenure. These results suggest that as employees accumulate experience within the organization, they are more likely to develop stronger psychological bonds and a heightened sense of loyalty and responsibility.

This finding is consistent with prior empirical research emphasizing the role of tenure in shaping organizational commitment. For instance, Orpen (1993) demonstrated that increased work experience contributes to higher levels of commitment by reinforcing employees' familiarity with organizational structures and enhancing their integration within the institutional environment. Similarly, Garipagaoglu (2013) found that employees with more than ten years of experience exhibit stronger organizational loyalty, largely due to the development of stable interpersonal relationships and deeper identification with organizational goals.

However, the present findings diverge from studies that report no significant relationship between experience and organizational commitment. For example, Al-Gharbawi (2014) found that tenure did not significantly influence commitment levels, attributing this outcome to the homogeneity of the sample, which consisted primarily of employees with moderate or limited experience. These discrepancies highlight the context-dependent nature of the relationship between professional experience and organizational commitment.

From a theoretical perspective, the results support the notion that professional experience primarily influences the psychological and normative dimensions of commitment, rather than instrumental attachment. As employees spend more time within the organization, they are likely to internalize its values, develop stronger social ties, and experience increased alignment with organizational objectives, thereby reinforcing both affective and normative commitment.

Recommendations and Practical Implications

Based on the empirical findings of this study, several strategic recommendations can be proposed to enhance organizational commitment within the Port of Djen Djen.

First, it is essential for organizational leadership to integrate the study's findings into a comprehensive human resource management strategy aimed at strengthening employee commitment. This requires aligning HR policies with the identified

determinants of commitment, particularly demographic and organizational variables that influence different dimensions of employee attachment.

Second, targeted efforts should be made to enhance affective commitment, which was found to be the weakest dimension among the three components. Strengthening emotional attachment requires the implementation of initiatives that foster a sense of belonging, organizational identification, and shared purpose. Such initiatives may include participatory leadership practices, improved internal communication, recognition systems, and the development of an inclusive organizational culture.

Third, the organization should adopt a data-driven and differentiated approach to employee engagement, recognizing that commitment is influenced by multiple factors, including age, gender, departmental context, and professional experience. Tailored interventions designed to address the specific needs and expectations of different employee groups are likely to yield more effective outcomes than uniform strategies.

Fourth, it is recommended to expand future research to include a broader range of employees, encompassing operational, administrative, and supervisory staff. This would enable a more comprehensive understanding of organizational commitment across different hierarchical and functional levels, thereby improving the generalizability of the findings.

Finally, further research on organizational commitment should be encouraged across different sectors and institutional contexts, particularly within public-sector and infrastructure organizations. Comparative studies across industries would provide valuable insights into the generalizability of the findings and support the development of more adaptable and context-sensitive management strategies.

Conclusion

This study provides a comprehensive empirical examination of the determinants of organizational commitment within the context of a strategic public-sector enterprise. Grounded in the three-component model of organizational commitment, the research offers a nuanced analysis of how demographic and organizational variables influence the multidimensional structure of employee attachment.

The findings confirm that organizational commitment is not a homogeneous construct but rather a multifaceted phenomenon shaped by distinct antecedents. Specifically, the results demonstrate that continuance commitment constitutes the dominant form of attachment among employees, indicating that organizational retention is largely driven by pragmatic considerations such as job stability and perceived costs of leaving. In contrast, affective commitment—the dimension most closely associated with emotional engagement and organizational identification—was found to be comparatively weaker, highlighting a critical gap in psychological attachment.

Furthermore, the study reveals that different variables exert differentiated effects across commitment dimensions. Age and professional experience were found to significantly influence affective and normative commitment, suggesting that tenure and career progression strengthen emotional bonds and moral obligation toward the organization. In contrast, gender and departmental affiliation primarily affected continuance commitment, underscoring the role of structural and contextual factors in shaping instrumental attachment.

From a theoretical perspective, these findings reinforce the validity of the three-component model and contribute to the literature by providing context-specific empirical evidence from a public-sector infrastructure organization, a setting that remains relatively underexplored. The study highlights the importance of examining organizational commitment through a multidimensional lens and demonstrates that its determinants are both context-dependent and dimension-specific.

From a practical standpoint, the results underscore the necessity of adopting strategic and differentiated human resource management practices. Enhancing organizational commitment requires not only addressing structural factors that influence continuance commitment but also fostering emotional engagement through leadership, communication, and organizational culture. Strengthening affective commitment, in particular, is critical for promoting higher levels of motivation, innovation, and long-term organizational performance.

Despite its contributions, the study is not without limitations. The relatively small sample size and its focus on a single organizational context may limit the generalizability of the findings. Future research is therefore encouraged to adopt larger and more diverse samples, as well as comparative designs across sectors and regions, to further validate and extend the present results.

In conclusion, this study provides valuable insights into the dynamics of organizational commitment and highlights the need for evidence-based, context-sensitive management strategies. By aligning organizational practices with the multidimensional nature of employee commitment, institutions can enhance workforce stability, strengthen organizational loyalty, and achieve sustainable performance outcomes.

DECLARATIONS

Ethical Approval and Consent to Participate

This study was conducted in accordance with established ethical standards for social science research. All procedures involving human participants were performed in line with institutional and international ethical guidelines. Participation in the study was voluntary, and informed consent was obtained from all respondents prior to data collection. The questionnaire was designed to ensure anonymity and confidentiality, and no personally identifiable information was collected.

Consent for Publication

All authors have reviewed and approved the final version of the manuscript and consent to its publication. The authors affirm that the work has not been published previously and is not under consideration for publication elsewhere.

Availability of Data and Materials

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request. Due to privacy and institutional considerations, raw data are not publicly accessible but can be shared for academic purposes under appropriate conditions.

Competing Interests

The authors declare that they have no competing interests, financial or non-financial, that could have influenced the research outcomes or interpretation of the findings.

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Authors' Contributions

- Brihmouche Imad Eddine: Conceptualization, methodology, data collection, formal analysis, writing – original draft.
- Birouk Hana Nor Elhouda: Supervision, validation, review and editing, theoretical framing, and final manuscript approval.

All authors have read and approved the final manuscript.

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AI Use Disclosure Statement

The authors confirm that no generative artificial intelligence tools were used in the collection, analysis, or interpretation of data. AI-assisted tools may have been used for language editing and formatting purposes only, without affecting the scientific integrity or originality of the work.

Research Involving Human Participants

This study involved human participants in the form of a voluntary questionnaire survey. All participants were informed about the purpose of the study and their right to withdraw at any time. The study adhered to principles of confidentiality, anonymity, and ethical research conduct.

Data Privacy and Confidentiality Statement

All data collected in this study were anonymized and handled with strict confidentiality. The responses were used solely for academic and research purposes, and no individual participant can be identified from the published results.

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