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## Analysis of Burnout among Academic and Administrative Staff at the Polytechnic University of Tulancingo

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**Abstract:** This study analyzes the burnout syndrome in academic and administrative staff at the Polytechnic University of Tulancingo, exploring differences in the dimensions of emotional exhaustion, depersonalization and personal accomplishment, as well as variations by gender. The research had a quantitative approach, with a descriptive, correlational scope and a cross-sectional design. For this work, a total sample of 229 participants was taken, where 162 were academic staff and 67 administrative staff. The instrument used was the Maslach Burnout Inventory (MBI). The results revealed significant differences between both groups, where teachers reported higher levels of emotional exhaustion and depersonalization, while administrative staff showed a lower perception of personal accomplishment. Regarding gender, women presented higher levels of emotional exhaustion and personal accomplishment, whereas men showed greater depersonalization. These findings highlight the need to consider work and gender dynamics when studying the impact of burnout in educational institutions. The study highlights the



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importance of implementing personalized strategies to mitigate burnout, such as stress management programs for teachers and redesigning tasks for administrative staff. These actions, adapted to the particularities of each group, will not only promote well-being at work but also contribute to strengthening the quality of educational services and the organizational environment.

**Keywords:** Burnout, emotional exhaustion, depersonalization, gender.

## 图兰辛戈理工大学教职员工职业倦怠分析

**摘要：**本研究分析了图兰辛戈理工大学学术和行政人员的倦怠综合征，探讨了情绪衰竭、非人格化和个人成就感维度的差异，以及性别差异。本研究采用定量方法，采用描述性、相关性和横断面设计。本研究共纳入229名参与者，其中162名学术人员和67名行政人员。使用的工具是马斯拉赫倦怠量表（MBI）。结果显示，两组之间存在显著差异：教师报告的情绪衰竭和非人格化程度较高，而行政人员的个人成就感较低。在性别方面，女性的情绪衰竭和个人成就感水平较高，而男性的非人格化程度较高。这些发现强调了在研究教育机构倦怠的影响时需要考虑工作和性别动态。本研究强调了实施个性化策略以缓解倦怠的重要性，例如为教师制定压力管理计划和为行政人员重新设计工作任务。这些针对每个群体特殊情况的行动不仅可以促进工作幸福感，还有助于提高教育服务质量和组织环境。

**关键词：**倦怠、情绪耗竭、人格解体、性别

### 1. Introduction

Burnout syndrome significantly affects academic and administrative staff in the educational field, manifesting as emotional exhaustion, depersonalization, and lack of personal fulfillment [1]. The syndrome has an impact on several factors [2], mainly in the educational field, such as high workload, academic responsibilities, rigorous deadlines and scarce institutional support [3], impacting mental and physical health [4].

This study seeks to analyze the significant differences in the dimensions of the burnout syndrome between academic and administrative staff at the Polytechnic University of Tulancingo, and how they vary according to gender. This research is justified by the need to understand and mitigate Burnout [5], in the university staff, allowing specific and personalized interventions to improve work well-being and educational quality [6]. The participants included all administrative and academic staff within the educational organization.

The selection of academic and administrative staff from the Polytechnic University of Tulancingo as the study object was based on the need to understand how the burnout syndrome affects these groups within a higher education institution. This population was chosen because they play critical roles in teaching and

administrative management, making them susceptible to high levels of work-related stress.

The findings obtained will allow for developing specific strategies to mitigate burnout in these groups, contributing to workplace well-being and the improvement of educational quality. In addition, the results can be used as a reference for similar studies in other higher education institutions.

The main objective was to analyze the levels of emotional exhaustion, depersonalization, and fulfillment of academic and administrative staff; to subsequently compare the dimensions of the syndrome between both groups; and to consecutively evaluate the differences according to gender. These objectives will be achieved through the Maslach Burnout Inventory (MBI) and statistical analysis, providing a clear view of Burnout in the institution and recommendations for future interventions.

### 2. Literature Review

Various investigations have highlighted that the burnout syndrome is not only a consequence of the teachers' working conditions but also of the interaction between various personal and organizational factors [7]. Academic stress and lack of resources in educational institutions are factors that contribute significantly to teacher burnout. Often, teachers do not have the

necessary support from their institutions to cope with the constant pressure of fulfilling multiple responsibilities. The academic environment often does not provide adequate conditions for rest, continuous training or recognition, which can seriously affect the emotional well-being of education professionals. In addition, the lack of pedagogical tools or the excess of administrative tasks add to the wear and tear that ends up undermining the motivation and commitment of teachers [8].

On the other hand, various studies have identified organizational climate and work commitment as key factors in the appearance of the burnout syndrome. As stated in [9], teachers who feel supported by their institutions, both professionally and personally, are less likely to experience burnout. Institutional policies that promote well-being, continuous professional development, and work-life balance are essential to prevent burnout. In addition, establishing psychological support protocols and creating spaces where teachers can express their concerns and emotions are effective measures to mitigate the effects of work stress. The feeling of belonging to an institution that values and respects its teachers also plays a crucial role in preventing emotional burnout.

The sense of vocation of educators also influences the prevalence of burnout. Teachers who feel a strong vocation toward their educational work are less likely to develop severe symptoms of burnout [10]. Vocation is not only associated with intrinsic motivation to teach, but also with the ability to find meaning in everyday tasks and resilience despite difficulties that arise in teaching. Vocation can function as a protective mechanism that helps educators cope with the emotional challenges of their work. However, when this vocation is hampered by external factors, such as lack of institutional support or work overload, teachers may feel overwhelmed and lose a sense of fulfillment in their work.

The impact of burnout is not limited to the workplace but has repercussions on the mental and physical health of those affected. People who suffer from this syndrome often experience high levels of anxiety, depression, and even psychosomatic disorders such as chronic pain, sleep disorders, and cardiovascular problems. Burnout is closely related to low job happiness, leading to a cycle of progressive exhaustion. Lack of job satisfaction not only affects teachers' motivation but also influences their ability to provide quality education [11]. When teachers feel emotionally exhausted, their interaction with students can be compromised, negatively affecting the teaching-learning process.

When teachers feel emotionally exhausted, their interaction with students can be compromised, negatively affecting the teaching-learning process.

Furthermore, a positive and healthy workplace environment can serve as a barrier to burnout. Aspects such as class size, support from the management team and the implementation of inclusive education programs can make a difference in the levels of stress experienced by teachers. An environment in which collaboration between colleagues, the sharing of good practices and the active participation of teachers in institutional decision-making are promoted can significantly reduce levels of emotional exhaustion [12]. Teachers who enjoy an environment in which their work is valued and they are given the necessary support have a greater chance of maintaining their emotional and professional well-being.

Another factor that directly influences teacher well-being is interpersonal support within the educational environment. Healthy relationships between teachers and students not only improve the classroom environment but also act as a buffer against burnout. Teachers who enjoy a supportive and cooperative environment with their students and colleagues are more likely to experience satisfaction and well-being in their work. In fact, positive bonds with students can revitalize enthusiasm for teaching and reduce feelings of depersonalization [13].

Despite the growing attention to burnout in the university setting, there are few studies that focus specifically on staff at polytechnic universities. Furthermore, most research has been conducted in developed countries, which limits our understanding of the phenomenon in Latin American contexts such as Mexico. Therefore, this study seeks to fill this gap by analyzing burnout in teachers and administrators at the Polytechnic University of Tulancingo.

Finally, the prevention and treatment of the burnout syndrome require a comprehensive approach involving both individuals and educational institutions. Developing workplace wellness strategies, implementing psychological support policies, promoting ongoing training, and creating an environment that values teaching are essential to mitigate the negative effects of burnout [14]. Likewise, implementing self-care programs, promoting a balanced workload, and fostering collaboration between teachers and the administration are key factors to ensure a healthy and productive educational environment [15].

### 3. Methodology

#### 3.1 Design

The study was conducted with a quantitative approach and a descriptive and correlational scope, and the design was cross-sectional, allowing to describe the characteristics of the burnout syndrome in the academic and administrative staff of the Polytechnic University of Tulancingo, and to explore the relationships between the variables of interest. This non-experimental

approach involved observing the variables in their natural context and collecting data at a single point in time, without manipulating the variables. In this way, patterns, significant differences, and correlations between key variables related to the syndrome were identified, providing a comprehensive view of the phenomenon.

### 3.2 Participants

The target population of the study was the academics with Bachelor's, Master's and Doctorate degrees (full-time professor and part-time professor) and the administrative staff of the Polytechnic University of Tulancingo. The sample consisted of 229 participants, distributed among 162 teachers (70.7%) and 67 administrative staff (29.3%). Regarding gender, 143 women (62.4%) and 86 men (37.6%) participated, which guaranteed a proportional and diverse representation for the analysis of the burnout syndrome in this context.

### 3.3 Instrument

The instrument used to measure the burnout syndrome was the Maslach Burnout Inventory (MBI), which is widely recognized for its validity and reliability in the work context. This instrument is composed of 22 items distributed in three key dimensions:

- 1) Emotional exhaustion: Measures psychological fatigue associated with emotional workload.
- 2) Depersonalization: Evaluates negative or distant attitudes toward the work environment.
- 3) Personal fulfillment: Measures satisfaction and perceived success at work.

This instrument is widely recognized for its validity and reliability in the work context.

### 3.4 Procedure

The procedure began with the selection of the sample and obtaining informed consent from the participants. Then, the MBI questionnaire was distributed and the data were collected over a given period. November-December 2024 The confidentiality and anonymity of the participants was guaranteed. The MBI consists of 22 items distributed in the three dimensions, with responses on a 7-point Likert scale: 1: Never and 7: Always.

First, authorization was requested from the university authorities to apply the questionnaire, and a digital form was designed to guarantee the anonymity and confidentiality of the responses, thus ensuring compliance with ethical principles in data collection.

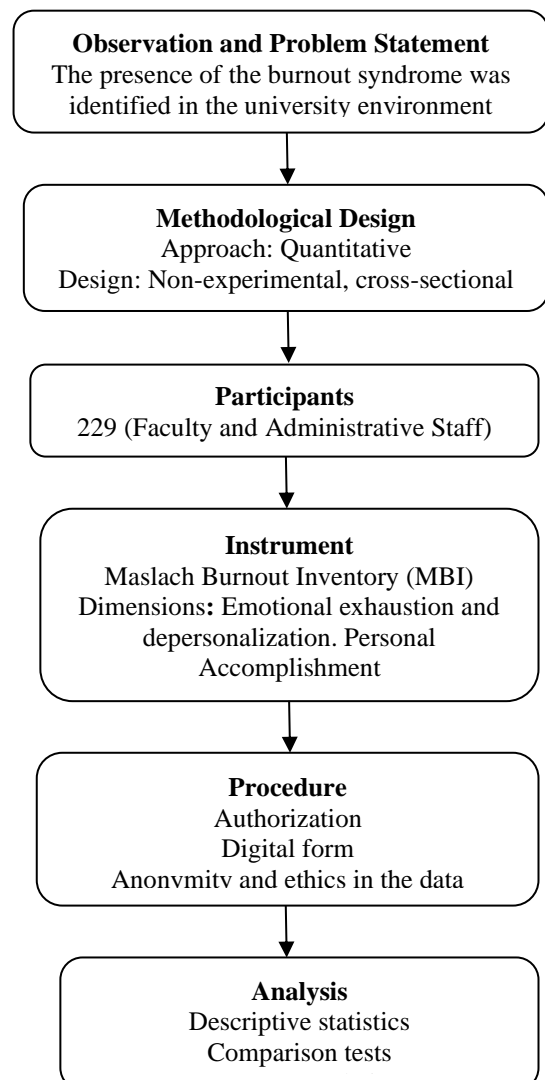
Subsequently, the questionnaire was administered to the participants digitally, which allowed for efficient data collection. The collection process was carried out over a three-week period, ensuring representative

participation of the sample and guaranteeing the confidentiality of the responses.

Finally, the collected data were imported into specialized statistical software (SPSS) for analysis.

### 3.5 Analysis of the Data

The data were analyzed using descriptive statistics to characterize the sample and comparison tests (ANOVA and Student t) to assess significant differences between the groups of teachers and administrators, as well as between genders. In addition, correlation was used to explore the relationships between the dimensions of Burnout. The statistical analysis was carried out in two stages. First, descriptive analyses were performed to calculate the measures of the central tendency and dispersion of each dimension of the burnout syndrome.



**Figure 1. Schematic representation of the research process** (developed by the authors, 2025)

In addition, scatter graphs and distributions were generated to visually observe and compare the differences between the groups of teachers and administrators, facilitating the interpretation of the

results. These procedures allowed a clear view of how the levels of emotional exhaustion, depersonalization, and personal accomplishment were distributed in both groups. On the other hand, inferential tests, specifically the Student's t-test, were used to compare the means of the dimensions evaluated between teachers and administrators. The main objective of this test was to identify whether there were significant differences in the three dimensions of the burnout syndrome (emotional exhaustion, depersonalization and personal accomplishment) between the two groups. This analysis allowed us to determine the magnitude of the differences and their statistical relevance, providing evidence on how job characteristics affect each group differently.

The procedure, as shown in Figure 1, included obtaining institutional authorization and applying a digital form ensuring anonymity and ethics in data collection. Subsequently, an analysis was conducted using descriptive statistics, comparison tests, and Pearson's correlation.

## 4. Results

The results indicate that, in the emotional exhaustion dimension, a significant difference was found ( $p=0.0447$ ), with teachers presenting slightly higher levels (mean = 1.97) than administrators (mean = 1.96). Regarding depersonalization, teachers also reported higher levels (mean = 0.66) compared to administrators (mean = 0.87). On the other hand, in the personal accomplishment dimension, teachers showed a significantly higher perception of professional achievement (mean = 5.26) compared to administrators (mean = 4.91). The p values obtained indicate that the difference in emotional exhaustion is statistically significant ( $p<0.05$ ), while for the other dimensions the reported differences do not specify their statistical significance in the sample.

The Student's t-test analysis confirmed that there were significant differences between teachers and administrators in the dimensions of the burnout syndrome. These differences reflect how work and emotional demands affect each group differently, with teachers presenting higher levels of emotional exhaustion and depersonalization, while administrators experience lower levels of personal fulfillment. These findings reinforce the need to design specific interventions adapted to the characteristics and needs of each group.

The Pearson correlation was used to evaluate the relationship between the dimensions of the burnout syndrome (emotional exhaustion, depersonalization and personal fulfillment) in the groups of teachers and administrators at the Polytechnic University of Tulancingo. This analysis allowed us to explore both the intensity and the direction of the linear relationships

between these variables, providing a detailed view of how the different dimensions of the syndrome interrelate in both groups. The Pearson correlation facilitated the identification of patterns, such as the possible association between emotional exhaustion and an increase in depersonalization or a decrease in personal fulfillment.

This procedure was key to understanding how the different dimensions of Burnout affect teachers and administrators in a similar or different way.

The relationship between the dimensions of the burnout syndrome showed that emotional exhaustion and depersonalization present a moderate positive correlation in teachers ( $r=0.279$ ), indicating that high levels of emotional exhaustion tend to be associated with higher levels of depersonalization, while in administrators this relationship was weaker ( $r=0.49$ ). Regarding the relationship between emotional exhaustion and personal achievement, the correlation was negative in both groups ( $r=-0.30$  for teachers and  $r=-0.39$  for administrators), suggesting that higher levels of emotional exhaustion are associated with a lower perception of personal achievement. Similarly, depersonalization and personal accomplishment also presented negative correlations ( $r=-0.39$  in teachers and  $r=-0.46$  in administrators), showing that more distant or negative attitudes toward the work environment are related to a reduced perception of personal accomplishment.

### 4.1. Descriptive Analysis

The means and standard deviations of the three dimensions of the burnout syndrome were calculated: emotional exhaustion, depersonalization and personal accomplishment, differentiated by group (teachers and administrators) and by gender (men and women).

Teachers: they presented higher levels of emotional exhaustion and depersonalization compared to the administrative staff.

- Administrative staff: they showed lower personal accomplishment compared to teachers.
- By gender: women reported higher levels of emotional exhaustion and personal accomplishment, whereas men presented higher levels of depersonalization.

Table 1 shows that the administrative staff reported low levels of emotional exhaustion and depersonalization. Although the means are low, the standard deviations reflect some variability, indicating isolated cases with higher scores. Regarding personal accomplishment, they suggest a moderate perception of professional achievement, although some participants reported minimal values, evidencing that a part of the sample could experience a limited perception of success in their work role.

**Table 1. Dimensions of administrative staff burnout** (compiled by the authors, 2025)

	Average	Median	Standard Deviation
Emotional Exhaustion	1.96	1	1.85
Depersonalization	0.87	0.4	1.18
Personal fulfillment	4.91	5	1.02

Table 2 presents the descriptive statistics of the dimensions of the burnout syndrome in academic staff. Emotional exhaustion, with values ranging from 0 to 5.67, depersonalization indicates low levels in most cases, and personal achievement, on the other hand, suggests a generally high perception of professional achievement, with minimums of 1.5 in isolated cases.

**Table 2. Dimensions of burnout in teaching staff** (compiled by the authors, 2025)

	Emotional Exhaustion	Depersonalization	Personal fulfillment
Emotional Exhaustion	1	0.279104596	0.3000622
Depersonalization	0.2791045	1	-0.3956029
Personal fulfillment	-0.3006228	-0.395602951	1

**Table 3. Correlation between dimensions of burnout for administrative staff** (compiled by the authors, 2025)

	Emotional Exhaustion	Depersonalization	Personal fulfillment
Emotional Exhaustion	1	0.49	0.39
Depersonalization	0.49	1	-0.46
Personal fulfillment	-0.39	-0.46	1

**Table 4. Correlation between Burnout dimensions for teaching staff** (compiled by the authors, 2025)

	Average	Median	Standard Deviation	Maximum
Emotional Exhaustion	1.969	1.826	1.333	5.66
Depersonalization	0.655	0.2	0.811	4.44
Personal fulfillment	5.27	5.63	0.864	6

Table 3 shows the correlations between the dimensions of the burnout syndrome in academic staff. Emotional exhaustion showed a moderate positive correlation with depersonalization, indicating that the greater the emotional exhaustion, the greater the tendency to develop negative attitudes toward the work environment. In addition, both emotional exhaustion and depersonalization showed negative correlations with personal accomplishment, suggesting that higher levels of burnout or job disengagement are associated with a lower perception of professional achievement.

Table 4 shows the correlations between the dimensions of burnout in teachers. There is a moderate positive correlation between emotional exhaustion and depersonalization, indicating that the greater the exhaustion, the greater the tendency to develop negative attitudes toward work. In addition, both emotional exhaustion and depersonalization have moderate negative correlations with personal accomplishment, reflecting that higher levels of emotional exhaustion and detachment are associated with a lower perception of professional achievement.

Table 5 presents descriptive statistics for burnout by gender, considering administrative and teaching staff. Women reported a higher mean in emotional exhaustion than men. In depersonalization, men obtained a slightly higher mean than women. Finally, women showed a higher mean in personal accomplishment compared to men.

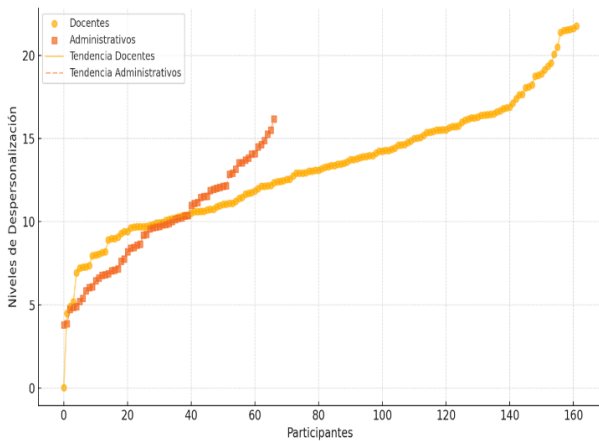
**Table 5. Burnout syndrome by gender** (compiled by the authors, 2025)

	Gender	Feminine	Masculine
Emotional Exhaustion		2.268	1.672
Depersonalization		0.585	0.728
Personal fulfillment		5.365	5.163

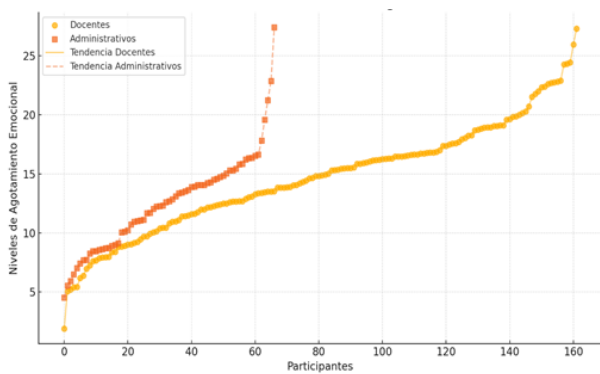
Figure 2 illustrates the distribution of emotional exhaustion levels among teachers and administrators; the Student's t-test formula is used to determine whether the differences between the means of both groups are statistically significant.

Figure 3 shows the distribution of depersonalization levels, a dimension of the burnout syndrome that reflects negative or distant attitudes toward the work environment.

This could be related to the more routine and less emotionally rewarding nature of administrative tasks, which can lead to a disconnection from the work environment. In contrast, teachers, although also facing levels of depersonalization, show less intensity, possibly because they find more meaning in their interaction with students and in their educational role, despite the high emotional demands.

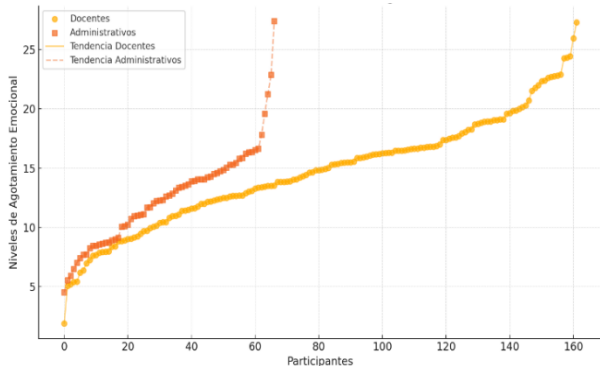


**Figure 2. Emotional exhaustion among academics and administrators** (developed by the authors, 2025)



**Figure 3 Levels of depersonalization among academics and administrators** (developed by the authors, 2025)

Figure 4 presents the distribution of personal achievement levels, a dimension of the burnout syndrome that measures the perception of success and accomplishment at work. These differences reflect that teachers perceive a greater sense of professional achievement compared to administrative staff, and the numerical results suggest a significant difference in this dimension.



**Figure 4. Levels of personal achievement among academics and administrators** (developed by the authors, 2025)

The graph highlights how administrative staff have a lower perception of personal fulfillment, possibly

attributed to the routine nature of their tasks and less direct interaction with academic or student achievements. In contrast, teachers, despite facing high emotional demands, find greater satisfaction in their work, probably derived from the constant interaction with students and the positive impact they perceive in their educational environment.

#### 4.2. Inferential Analysis

Student's t-tests revealed significant differences between the groups:

##### Teachers vs. Administrative:

**Emotional exhaustion:**  $t(227) = 2.03$ ,  $p = 0.0447$ ,  $d = 0.30$  (small effect).

**Depersonalization:**  $t(227) = 1.25$ ,  $p = 0.21$  (not significant).

**Personal accomplishment:**  $t(227) = 2.57$ ,  $p = 0.01$ ,  $d = 0.35$  (small-moderate effect).

##### Comparison by gender:

**Emotional exhaustion:**  $t(227) = 2.89$ ,  $p = 0.004$ ,  $d = 0.40$  (moderate effect).

**Depersonalization:**  $t(227) = 1.72$ ,  $p = 0.09$  (not significant).

**Personal achievement:**  $t(227) = 2.11$ ,  $p = 0.03$ ,  $d = 0.28$  (small effect).

These differences reflect how work and emotional demands affect the groups and genders analyzed in different ways, highlighting the need to design specific strategies that address the critical dimensions of the burnout syndrome in the institution, adjusting to the characteristics and needs of each group.

#### 4.3. Correlational Analysis

##### Teachers:

**Emotional exhaustion and depersonalización:**  $r = 0.49$ ,  $p < 0.05$  (moderate positive correlation).

**Emotional exhaustion and personal accomplishment:**  $r = -0.30$ ,  $p < 0.05$  (weak negative correlation).

##### Administrators:

**Emotional exhaustion and depersonalization:**  $r = 0.39$ ,  $p < 0.05$  (moderate positive correlation).

**Emotional exhaustion and personal accomplishment:**  $r = -0.39$ ,  $p < 0.05$  (moderate negative correlation).

The following Pearson correlations were identified:

The ANOVA results revealed significant differences in the two dimensions of the burnout syndrome between teachers and administrative staff. Specifically, teachers showed higher levels of emotional exhaustion ( $F(1, N) = 8.39$ ,  $p = 0.004$ ), suggesting that the emotional and academic demands of their work negatively impact their well-being. Additionally, administrative staff reported

lower personal accomplishment compared to teachers ( $F(1, N) = 6.52, p = 0.011$ ), which may be linked to the more routine nature of their roles and a reduced sense of recognition.

Conversely, no significant differences were found in the depersonalization dimension ( $F(1, N) = 2.45, p = 0.119$ ), indicating that both teachers and administrative staff experience similar levels of emotional detachment from their work environment.

## 5. Discussion

The findings obtained in this research align with previous studies on the burnout syndrome in the educational sector, highlighting its differentiated effects between teachers and administrators, as well as the influence of socio-labor factors on its manifestation.

In the present study, teachers exhibited higher levels of emotional exhaustion and depersonalization compared with administrators, which can be explained by the high emotional, academic, and organizational demands inherent to the teaching role. This finding is consistent with the research by [16], who, in a study conducted at Universidad Peruana Unión (Lima, Peru), identified that both teachers and administrators are exposed to similar levels of workload, but teachers show a greater tendency to develop symptoms of the burnout syndrome. The authors also pointed out that the lack of institutional support and the accumulation of tasks directly influenced emotional exhaustion, reinforcing the need for targeted interventions for this group.

In contrast, the administrators in this study showed lower levels of emotional exhaustion and depersonalization but reported a significantly lower perception of personal accomplishment, suggesting a lack of motivation related to routine tasks or lack of recognition. This pattern is supported by [17], who studied administrative staff at a technological institution in Yucatán, Mexico. Their research revealed generally low levels of burnout, associated with the possible presence of eustress (positive stress), although they also identified lower personal accomplishment among older employees, which could be related to a gradual decline in their sense of professional purpose.

Additionally, in this study, a significant inverse correlation was identified between personal accomplishment and levels of work-related stress ( $p < 0.01$ ), implying that higher stress is associated with a lower sense of achievement and job satisfaction. This same finding was reported by [18] who analyzed burnout syndrome in administrative staff at a university in the province of El Oro, Ecuador. Using the Maslach Burnout Inventory and the OIT-WHO test, they found that 98% of the participants showed signs of burnout, and 71.3% reported high levels of work-related stress,

highlighting an inverse relationship between personal accomplishment and work-related stress.

Regarding the gender analysis, this study revealed that women experience higher emotional exhaustion and a greater perception of personal accomplishment, while men present higher depersonalization. This pattern was also described by, who observed that women tend to be more emotionally involved in their work environment, which may explain the higher levels of exhaustion but also a greater identification with their work. Men, on the other hand, may adopt more distant attitudes as a coping strategy for stress.

The results confirm the regional trends observed in previous research, showing that Burnout Syndrome is closely related to workload, lack of institutional support, and perceived professional recognition. It is reaffirmed that the dimensions of the syndrome vary according to the role within the institution, with teachers being more prone to emotional exhaustion and depersonalization, while administrators tend to experience lower personal accomplishment. Furthermore, the gender analysis reveals differences in how Burnout is experienced: women exhibit higher emotional exhaustion but also a greater perception of personal accomplishment, while men reflect higher levels of depersonalization. These findings underscore the importance of adopting differentiated and context-sensitive institutional strategies aimed at preventing burnout through a comprehensive approach that considers the particularities of the educational environment.

## 6. Conclusion

The results obtained through the quantitative, descriptive-correlational approach and cross-sectional design allowed for the identification of statistically significant differences in the dimensions of the burnout syndrome between the teaching and administrative staff of Universidad Politécnica de Tulancingo. The analysis of variance and Student's t-tests applied to the data collected through the Maslach Burnout Inventory (MBI) demonstrated that teachers exhibited higher levels of emotional exhaustion and depersonalization, while administrative staff reported a lower perception of personal accomplishment.

These differences reflect how the specific characteristics of each job role influence the manifestation of Burnout. Among teachers, constant academic and emotional demands could explain the high levels of emotional exhaustion ( $M=1.97$ ) and depersonalization ( $M=0.66$ ). In contrast, for administrative staff, the routine and operational nature of their functions is associated with moderate stress levels but a lower sense of achievement ( $M=4.91$ ).

The correlational analysis revealed significant associations among the dimensions of the syndrome. In



both groups, a positive correlation was observed between emotional exhaustion and depersonalization, as well as negative correlations between these dimensions and personal accomplishment. These patterns confirm that as emotional strain or affective disengagement from the work environment increases, the sense of satisfaction and professional success decreases.

Additionally, gender-based analysis showed that women reported higher levels of emotional exhaustion and personal accomplishment, whereas men exhibited higher levels of depersonalization. These findings highlight the influence of sociodemographic factors on the experience of Burnout and suggest the importance of considering gender as a key variable in the design of intervention strategies.

Overall, the research findings support the effectiveness of the proposed approaches. Implementing stress management programs and emotional support initiatives for teachers, as well as redesigning tasks and activities that promote motivation and a sense of achievement among administrative staff, are relevant and justified measures. Furthermore, these actions should integrate a gender perspective as a cross-cutting component.

Finally, this study provides relevant implications for both institutional management and future research. The results can serve as a foundation for developing evidence-based workplace wellness policies tailored to the realities of the educational context. Additionally, a longitudinal follow-up on Burnout syndrome and an evaluation of the effectiveness of implemented strategies are recommended to further enhance staff well-being and the institution's educational quality.

## Declarations

### Author Contributions

Conceptualization, F.A.E.C., and M.R.L.T.; methodology, M.R.L.T.; software, spatial data, M.R.H., and F.O.D.R.; validation, F.A.E.C., and M.R.L.T.; formal analysis, M.R.L.T. and F.O.D.R.; investigation, M.R.L.T.; resources, M.R.L.T.; data curation, F.A.E.C., and M.R.L.T.; writing-original draft preparation, F.A.E.C., and M.R.H.; writing-review and editing, M.R.L.T.; visualization, M.R.H., and F.O.D.R.; supervision, M.R.L.T.; project administration, F.A.E.C. All authors have read and agreed to the published version of the manuscript.

### Data Availability Statement

Data presented in this study are available on request from the corresponding author.

### Funding

No finding information is available.

### Institutional Review Board Statement

The study was conducted in accordance with the Declaration of Helsinki and was approved by the Institutional Review Committee of the Universidad Politécnica de Tulancingo, Tulancingo de Bravo, Hidalgo, México.

### Informed Consent Statement

Informed consent was obtained from all the subjects involved in the study.

### Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and falsification, double publication and submission, and redundancies have been completely observed by the authors.

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