

**Quantitative study of the effect of professional stress on absenteeism,
mediated by organizational engagement, among primary public
school teachers**

**Étude quantitative de l'effet du stress professionnel sur l'absentéisme
, médié par l'engagement organisationnel, chez les enseignants des
écoles publiques primaires**

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Abstract

The education sector is a vital pillar of social progress, shaping future leaders and responsible citizens. Teachers, as essential actors in this sector, have an invaluable role to play. Their impact extends far beyond the mere transmission of academic knowledge as they guide and shape young minds. However, it is important to recognize that teachers themselves are not immune to the challenges and pressures of the professional environment, particularly stress, which can hinder their well-being. In the face of these challenges, it is crucial to examine the relationship between work-related stress, organizational commitment, and absenteeism within educational institutions. A quantitative approach, such as the one used in this study with Smart PLS, allows for a systematic analysis and empirical validation of these relationships. The empirical survey was conducted with 134 teachers working in public primary schools in rural areas. The results highlight the significant impact of stress on organizational commitment, which acts as a mediator in the relationship between stress and absenteeism. This suggests that teachers' commitment to their organization can influence how work-related stress affects their presence and well-being.

Keywords : Professional stress ; Organizational commitment ; Absenteeism; education ; Rural areas.

Résumé

Le secteur de l'éducation est un pilier essentiel du progrès social, façonnant les futurs leaders et citoyens responsables. Les enseignants, en tant que acteurs essentiels de ce secteur, ont un rôle inestimable à jouer. Leur impact va bien au-delà de la simple transmission de connaissances académiques en guidant et en modelant les jeunes esprits. Cependant, il est important de reconnaître que les enseignants eux-mêmes ne sont pas immunisés contre les défis et les pressions du milieu professionnel, notamment le stress, qui peut entraver leur bien-être.

Face à ces défis, il est crucial d'examiner la relation entre le stress au travail, l'engagement organisationnel et l'absentéisme dans le contexte des établissements éducatifs. Une approche quantitative, telle que celle utilisée dans cette étude avec Smart PLS, permet une analyse systématique et une validation empirique de ces relations. L'enquête empirique a été réalisée auprès de 134 enseignants travaillant dans des écoles primaires publiques en milieu rural. Les résultats mettent en évidence l'impact significatif du stress sur l'engagement organisationnel, qui agit comme médiateur dans la relation entre le stress et l'absentéisme. Cela suggère que l'engagement des enseignants envers leur organisation peut influencer la manière dont le stress au travail affecte leur présence et leur bien-être.

Mots clés : Stress professionnel ; engagement organisationnel; absentéisme ; éducation ; milieu rural.

Introduction

Work-related stress has been extensively studied to explore its positive and negative impacts. With the world of work constantly changing, workers and organizations need to adapt quickly and effectively. This increased pressure to meet performance expectations and organizational objectives in a competitive environment can lead to stress among employees. Stressors such as work overload, role conflict and lack of support from management can contribute to this tension. Stress at work can trigger harmful physical and emotional reactions, especially when workers feel overwhelmed by the demands and requirements placed on them (Daniel, 2019).

In this context, organizational stress poses critical challenges for educational institutions worldwide. The educational sector, characterized by high demands, tight schedules, and increasing workloads, often becomes a fertile ground for stressors (Ouazoul & Jemjami, 2022). These can erode organizational commitment and subsequently lead to absenteeism.

Teachers, in particular, face mounting pressures from various stakeholders, including administrators, parents, and policymakers, further exacerbating stress levels. As such, exploring the intricate dynamics between organizational stress, organizational commitment, and absenteeism among teachers is imperative for devising effective strategies to promote employee well-being and optimize educational outcomes.

Within this context, the concept of organizational commitment emerges as a key mediator in understanding the relationship between stress and absenteeism among teachers. Organizational commitment refers to the degree of allegiance and dedication employees feel towards their organization, encompassing affective, continuance, and normative dimensions.

This paper aims to delve into the impact of organizational stress on absenteeism through the lens of organizational commitment among teachers. By synthesizing existing literature and empirical evidence, this study seeks to elucidate the underlying mechanisms linking stress, commitment, and absenteeism within educational contexts. Moreover, it endeavors to identify potential intervention strategies and best practices for fostering a supportive work environment conducive to teacher retention and overall organizational success. Through a comprehensive analysis of these interconnected factors, this research aims to contribute valuable insights to the field of educational management and human resource development.

Besides contributing to a better understanding of this relationship, it is crucial to measure the impact of managerial innovation and market orientation on company performance. Therefore, our problem is as follows: « **To what extent does stress impact the absenteeism of Moroccan teachers in rural public primary schools through the mediating effect of organizational commitment ?** »

Furthermore, formulating our conceptual framework based on a literature review leads us to an empirical verification to test the relevance of our conceptual model. We seek to investigate the effect of stress on absenteeism through the mediating effect of professional engagement. To do so, we adopted a positivist epistemological stance with a hypothetico-deductive mode of reasoning and a quantitative approach. The method of structural equations using the Partial Least Squares (PLS) approach was employed to test the hypotheses. The empirical survey was conducted among 134 teachers working in public primary schools in rural areas.

1. Conceptual framework of professional stress, organizational commitment and absenteeism

1.1. Professional stress

1.1.1 Definition

First of all, the notion of ‘stress’ comes etymologically from the Latin « stringere », meaning to squeeze. In Old French, the notion of stress refers to tightness and oppression. This etymological research highlights the feeling of asphyxiation that we feel when we are overwhelmed by stress. The word stress has also been borrowed from the Anglo-Saxon language to designate feelings such as « misfortune, adversity, difficulty, affliction ».

Stress, a highly complex phenomenon, was initially conceptualized by Hans Selye as a sequence of reactions encompassing phases of alarm, resistance, adaptation, and ultimately exhaustion, which is viewed as pathological (Soulimani, 2002). It is defined as external pressure capable of disrupting the organism’s normal functioning.

The scientific literature offers numerous definitions of stress, often portraying it as a psychological state arising from the perception of an imbalance between perceived expectations and one’s assessment of their own abilities to meet task demands. Its effects extend beyond the psychological realm to impact physical health, well-being, productivity, and decision-making of those experiencing it.

According to Montano (2023), « *occupational stress can be defined as a progression that begins with a decline in professional enthusiasm. This decline leads to an increase in effort, ultimately resulting in heightened stress levels* ». Similarly, Gede, et al., (2023) assert that stress is « *a psychological reaction to pressures that exceed or overwhelm an individual’s capacity* ». Concurrently, as Ekawarna (2018) suggests, job stress manifests as « *individuals’ reactions when the demands and pressures of work exceed their capabilities and resources to manage them* ».

Considered a general adaptation symptom, stress is a physiological, psychological, and behavioral response of the organism to situations perceived as threatening, disruptive, or stimulating (Légeron, 2008). It appears as an emotional reaction when individuals face obstacles hindering their goal achievement. In the workplace, stress can stem from various factors such as workload, role expectations, physical environment, and scheduling constraints (Diandra & Bailey, 2006). Research indicates that job-related stress undermines motivation and diminishes performance capabilities (Schultz & DE Gault, 1990). In recent years, work-related stress has emerged as a public health concern, particularly due to its detrimental effects when it is intense or chronic. Regarded as a significant human, organizational, and societal challenge, it is considered a major psychosocial risk, alongside harassment and interpersonal violence (Bernaldo-De-Quirós, et al., 2015).

1.1.2 Antecedents of work-related stress

A multitude of factors can fuel the feeling of stress in the workplace. Among these, there is the organizational climate, which encompasses the norms, values, and practices of the company, as well as the clarity and workload defined by job descriptions. Additionally, recognition, or the lack thereof, can play a significant role in employees' perception of stress. Interpersonal relationships within the work team, as well as communication difficulties, can also contribute to increasing the level of tension felt. Moreover, the challenging balance between personal and professional life constitutes a frequent source of stress for many workers.

According to Gintrac (2011), when addressing the issue of workplace stress, it is crucial to consider demographic variables such as gender and age. Indeed, data suggest that the level of stress tends to decrease with age, likely due to greater experience and better management of stressful situations over time. However, it is noteworthy that stress appears to be more prevalent among women, perhaps due to various sociocultural pressures or multiple roles they often assume in their daily lives. These work stress factors can be summarized in the following table:

Table N°.1: Work-related stress factors

Authors	Work-related stressors
Zaitseva and al. (2016)	Psychological harassment
Mansour (2015)	Work-leisure conflict; social support from the immediate supervisor
Baggio and al. (2014)	Uncertainty and unpredictability; lack of recognition; interpersonal relationships; communication issues; organizational changes; and job design
Vinot (2013)	Communication; organization; management; family relationships; job complexity; workload; team cohesion; individual dimension
Dupret and Bocéréan (2013)	Gender, age, level of education, and employee status
Abord and Chatillon et al. (2012)	Workload; job demands; time pressure; and customer interaction
Steiler and Rosnet (2011)	Task characteristics, relational aspects, career-related factors, work/family interfac

Source: Literature Review

1.2. Organisationnal commitment

For years, organizational commitment has been defined and measured in different ways. Many researchers have studied and defined it (Meyer, et al., 2002), (McElroy, et al., 1993) and (Thevenet, 2007). Each of these authors attempts to understand this concept in their own way, either from an attitudinal or behavioral approach.

The lack of consensus on the definition of this term has led to it being considered as a multidimensional construct (Meyer & Allen, 1991). It is generally understood as « a socio-psychological concept which reflects the state of the relationship which has developed between the worker and his company. In general, it reflects the predisposition, the fit between the professional situation that makes the company its employees and the expectations of these employees ». Organizational commitment can be considered as the psychological attachment of employees to the organization and its objectives, as well as the desire to remain within this organization (Pieters, et al., 2019).

Meyer and Herscovitch (2020) state that organizational commitment is a psychological state that indicates the extent to which an individual feel connected and involved in achieving organizational goals and wishes to remain a member of that organization. It is an attitude of loyalty or faithfulness of a person in an organization by achieving the expected organizational goals and having no desire to leave it (Yusuf & Syarif, 2018).

For their part, Yüzbasıoglu & Dogan (2018) conceive of organizational commitment as the worker's level of participation and willingness to remain a member of the organization. It is a psychological link between workers and a company that leads to a series of beneficial organizational outcomes,

such as work behaviours and personal attitudes (Chai, et al., 2020). These influence the decision to stay with or leave the organization (Rifa'i, 2023). With this in mind, the authors created a three-dimensional model comprising three dimensions or components of commitment:

- Affective commitment refers to emotional attachment to and identification with the organization, which ultimately translates into a desire to remain in the organization and participate in the achievement of organizational goals;
- Calculated commitment refers to the individual's knowledge of the costs associated with leaving the organization;
- Normative commitment refers to a feeling of obligation to stay with the organization out of moral duty, loyalty, gratitude or to complete a project to which the individual feels committed in return for what they have acquired from it. Failure to fulfil this obligation generates a feeling of guilt in the employee.

Thus, employees who experience all three types of commitment will obviously have a strong desire to stay with the organization, but individual differences may lead to one type of commitment becoming the dominant explanation for voluntary turnover.

In this vein, Sutyem et al., (2020) attest that commitment is at the root of a person's survival within an organization and has repercussions on the efforts made by the employee to compete in order to maintain his or her status as a member or to obtain a better position within the organizational structure. This sense of commitment manifests itself not only in the day-to-day attitudes of employees, but also in their psychological aspect or way of thinking. An employee's emotional attachment to the organization that hired them is an indication of their organizational commitment (Karim & Rehman, 2012).

Furthermore, Sandrin and Gillet (2016) attest that organizational commitment is manifested through a positive attitude towards an activity, defined by vigour, dedication and absorption. Vigour is manifested by high levels of energy and resilience when carrying out an activity, even in the presence of obstacles. Dedication encompasses intense commitment to an activity, accompanied by feelings such as enthusiasm, inspiration, pride and challenge. Absorption is characterised by a heightened concentration on the activity, reaching a level where it becomes difficult to detach oneself from it.

Furthermore, according to Luthans (2006), organizational commitment is defined as a strong desire to remain a member of a particular organization, a desire to strive to meet the organization's expectations, and a certain belief in and acceptance of the organization's values and goals.

Based on the above definitions, it can be concluded that despite the influence of individual differences on individuals' choice to leave or stay in an organization, it is affective commitment that is most often associated with the desire to stay (Huhtala & Feldt, 2016).

1.3. Absenteeism

Absenteeism in the workplace is a serious and persistent hurdle faced by most of the employers in the contemporary landscape (Sitarević, et al., 2023). In line with this, Naik et al., (2023) assert that absenteeism poses an ongoing obstacle for organizations, adversely affecting their overall performance. It's generally defined as any period during which an employee is absent for a specified duration, regardless of the reason for the absence (Imran, et al., 2022). This includes absences due to illness, whether occupational or not, workplace accidents, absences related to strikes, maternity leave, as well as unjustified absences and disciplinary suspensions.

According to a historical definition of absenteeism, it refers to « *the frequent and unpredictable absence of an excessive proportion of employees* » (Claude Veil, 2012). It's noted that this definition is too broad and carries a judgmental tone.

According to the ANACT (National Agency for the Improvement of Working Conditions), « absenteeism is characterized by any absence that could have been prevented through early intervention to address factors contributing to the deterioration of working conditions, encompassing not only physical environments but also work organization, quality of employment relationships, balancing professional and personal time, and so forth »

The Larousse dictionary defines absenteeism at work as a lack of attendance or regularity. Absenteeism is characterized by recurrent absences. In their model of absenteeism, Steers and Rhodes (1978) define presence at work as the ability and motivation to be present. Some factors lead to an inability to be present at work, while others affect the motivation to be present.

To determine if absenteeism is linked to the capacity for attendance (a more positive concept), it's important to assess whether absenteeism stems from family issues, transportation difficulties, or illness. Meanwhile, the motivation to be present is connected with job satisfaction, organizational involvement, and economic circumstances. Theoretically, these two variables are expected to interact.

Many studies support the notion that absenteeism is not a homogeneous concept as different processes appear to explain different aspects of absenteeism (Bakker, Demerouti, De Boer & Schaufeli, 2003). Three models of absenteeism can be distinguished:

- The pain and avoidance model: in which absence is described as escaping from negative aspects of work. In this withdrawal-oriented model, absenteeism is typically interpreted as an escape, compensation for, or even a challenge to difficult working conditions (Chadwick-Jones, Nicholson, & Brown, 1982).
- The adaptation, adjustment, and misfit model: in which absence is viewed as the result of organizational socialization and processes of adapting to job demands (Johns, 2002).
- The decision model: in which absences are described as rational decisions or a choice process determined by goals.

There is a typology that appears to be the most comprehensive and recent among the various approaches to absenteeism (Randon et al., 2011). This typology distinguishes three main approaches:

- Individual approaches encompass personal factors (age, gender, health status, etc.) and attitudinal factors (engagement, intention to leave).
- Organizational approaches include general organizational characteristics, work environment, and work organization.
- Medical approaches comprise working conditions (Bouville, 2009).

2. Conceptual model

On the basis of the hypothetical links between the constructs discussed, we propose a conceptual model in which the variable Organizational commitment is conceived as a mediator in the relationship between Professional stress and Absenteeism.

The Relationship between professional stress and absenteeism

A great deal of research has examined the complex interaction between work-related stress and employee absenteeism. These studies have often sought to determine the extent to which the level of stress experienced by workers influences their propensity to be absent from work. Several researchers have looked at this relationship from different angles. For example, Moreau and colleagues (2012), as well as Chini (2003) and Jamal (2007), found a positive correlation between stress and absenteeism in their earlier work. Their conclusion seemed intuitively plausible and was supported by the results of some earlier research, such as Hendrix et al., (1991).

However, despite these initial observations, other researchers have questioned this apparent correlation. More recent studies by Bourbonnais and Mondor (2001), De Jong et al., (2001), Moreau et al., (2004), Niedhammer et al., (1998), Nielsen et al., (2007) have failed to establish a significant link between work stress and absenteeism. These contradictory results raise questions about the

complex nature of this relationship. They suggest that other variables, such as organizational culture, social support at work or other individual or organizational factors, may play a crucial role in understanding the dynamics between stress and absenteeism.

In conclusion, while some studies have suggested a direct link between stress and absenteeism, others have highlighted nuances and variations in this relationship. Understanding these differences and the underlying factors that influence them is essential for developing effective strategies for managing stress in the workplace and reducing absenteeism. That's why we propose to test the following hypothesis.

Hypothesis 1: There is a direct and positive relationship between professional stress and absenteeism.

The Relationship between professional stress and organizational commitment

The relationship between occupational stress and organizational commitment has been a major area of interest in various research fields. This complex relationship has been examined through diverse perspectives and contexts to understand its impact on individuals and organizations.

On one hand, it is often intuitive to think that work-related stress correlates negatively with organizational commitment. Indeed, occupational stress can lead to a range of adverse consequences on employees' well-being, including a decrease in their commitment to their work and organization. This perception is supported by the work of Gamassou (2005), who highlights this negative relationship between stress and organizational commitment.

This intuition is also reflected in the findings of meta-analyses conducted by Mathieu and Zajac (1990) as well as Meyer and colleagues (2002). These studies have shown a negative average correlation between stress and organizational commitment. Specifically, they have demonstrated that perceived stress among employees is often associated with a decrease in their affective commitment to the organization, while other forms of organizational commitment, such as calculative commitment, may increase in response to perceived stress.

However, despite these converging conclusions, it is worth noting that few studies have explored the relationship between occupational stress and normative organizational commitment. Carrier-Vernhet (2012) has highlighted this gap in the literature, underscoring the need for further research to fully understand this specific aspect of organizational commitment.

Hypothèse 2 : There is a direct and negative relationship between professional stress and organizational commitment.

The Relationship between organizational commitment and absenteeism

Thévenet and Vachette (1992) put forward a theory suggesting that absenteeism at work primarily stems from employees' lack of involvement. According to their argumentation, when workers do not feel engaged or invested in their tasks, it can lead to a lack of interest in their professional responsibilities, often resulting in increased absenteeism.

This perspective is supported by the research of Mathieu and Zajac (1990), who identified a significant and inverse correlation between employees' level of organizational commitment and their absenteeism rate. Their study highlights that employees who feel more attached to their organization tend to miss fewer days of work, suggesting that organizational commitment can act as a barrier against absenteeism.

Similarly, Meyer and colleagues (2002) support this idea by proposing that employees who are highly engaged in their organization are less likely to voluntarily miss work. Their research emphasizes the protective role of organizational commitment as a deterrent against absenteeism.

Given these converging findings, it becomes evident that a thorough study of the relationship between organizational commitment and absenteeism is relevant, especially in the specific context of teachers. By examining this relationship more closely within this professional population, it is possible to better understand the underlying mechanisms of absenteeism and formulate effective strategies to prevent it.

Hypothese 3 : Organizational commitment and absenteeism are directly and negatively correlated.

Organizational commitment as mediator between professional stress and absenteeism

Referring to the theory of Schaubroeck et al. (1989), which examines the complex interactions between stress and organizational behaviors, it is proposed that stressors can induce withdrawal reactions among individuals within the organization. These withdrawal reactions can manifest in various ways, including a decrease in organizational engagement. When employees are faced with sources of stress at work, it can compromise their attachment and investment in their work and in the organization.

The withdrawal behaviors mentioned in the theory of Schaubroeck et al., (1989) can include various forms of absenteeism, whether justified or unjustified. Indeed, when an employee experiences high levels of stress at work, they may be inclined to take days off to cope with this pressure or temporarily disengage from professional responsibilities. These absenteeism behaviors can have significant repercussions on the organization's functioning, particularly in terms of productivity and overall performance.

Thus, the theory of Schaubroeck et al., (1989) highlights the importance of considering the role of stress in the manifestation of withdrawal behaviors, including absenteeism, within the organization. Understanding these dynamics is crucial for developing effective strategies for stress management and promoting organizational engagement, aiming to reduce withdrawal behaviors and foster a healthy and productive work environment.

Hypothesis 4: Professional stress is positively associated with absenteeism through organizational commitment.

Figure 1: Conceptual model of research



Source: Developed from the literature review

3. Research Methodology

The formulation of our conceptual framework on the basis of a literature review leads us to an empirical verification that allows us to test the relevance of our conceptual model. There are a variety of ways of conducting an empirical study, and the methods chosen by the researcher must be in line with the study's objectives. In this section we will present our methodological choices regarding data collection, sampling methods and the measurement scales used in the questionnaire. The approach followed in this part of the research is a quantitative approach to meet the objective of our study.

3.1. The epistemological position

In order to explore the raised problem and conduct an empirical verification aimed at testing the validity of our conceptual model and resulting hypotheses, we adopted a positivist epistemological approach, relying on hypothetico-deductive reasoning and employing a quantitative methodology. To achieve this, we utilized the structural equation method through the PLS 4 approach to evaluate the formulated hypotheses.

To gather the necessary data for our study, we conducted an empirical survey of 134 Moroccan teachers employed in the public sector in rural areas. The questionnaire was predominantly administered through face-to-face interviews and partially via the Internet. The questionnaire comprised 49 items measuring professional stress, absenteeism and organizational commitment.

Three questions aimed to ascertain the demographic characteristics of the workers (gender, age, and years of service). The sample size was 134 individuals, including 83 men and 51 women. The majority of teachers were between 30 and 39 years old (32.1%), followed by those aged 40-49 (29.8.2%). Concerning years of service, the highest percentage was more than 15 years at 40.30%, with further details presented in Table 2.

Table No. 2: Demographic characteristics of respondents

Characteristics	Category	Number	Percentage
Age	20-29 Years	26	19.4%
	30-39 Years	43	32.1%
	40-49 Years	40	29.8%
	>50 years	25	18.7%
Gender	Male	83	61.94%
	Female	51	38.06%
Years of service	<5 years	18	13.43%
	5-9 years	25	18.65%
	10-14 years	37	27.62%
	> 15 years	54	40.30%

Source : Our analyses

3.2. Operationalization of constructs

Given that the variables in our model are qualitative in nature, it would be essential to operationalize them in order to measure the relationships between the variables in the model. Operationalization consists of breaking down each variable into several indicators reflecting the meaning of the variable. From this point of view, the researcher has two options: the first is to construct his own measurement scales. The second option, and the one we have opted for in this work, is to borrow from existing measurement scales. We therefore searched the literature for available measurement scales for each of the constructs in the model. We thought it appropriate to present those that were of good psychometric quality. The measurement scales chosen were contextualized.

To assess the variable of professional stress, we have chosen to use the measurement scale developed by Siegrist in 1996. This scale is designed to evaluate professional stress by highlighting the imbalance between the effort's individuals put into their work and the rewards they receive from it. It is structured around 23 items, grouped into three main axes:

- Efforts: This dimension includes 6 items aimed at assessing the amount of physical and mental effort individuals invest in their work.

- Rewards: This dimension consists of 11 items that examine the various forms of rewards perceived by individuals in their work, such as recognition, job security, and opportunities for advancement.
- Overcommitment: This dimension, comprising 6 items, explores individuals' tendency to invest excessively in their work, beyond what is reasonable or necessary.

To measure organizational commitment, we use the measurement scales developed by Meyer, Allen and Smith (1993). The measurement instrument contains 24 items for which validity has been verified and reliability judged to be good. Meyer et al (1993) reported internal consistency reliability estimates (Cronbach's alpha) for affective commitment (0.82), continuous commitment (0.74) and normative commitment (0.83). To minimize the risk of halo and contamination effects, items from the three dimensions of involvement (affective, normative and calculated) were mixed.

To measure absenteeism, our approach is based on that of Ndao and Diop (2008), incorporating two separate items: the first item focuses on the frequency of absences, while the second aims to assess their duration. This choice is motivated by the fact that the duration of absences can provide valuable insights into their origins. Prolonged absenteeism can be a symptom of increased fragility among workers, often associated with serious health problems. On the other hand, repeated short absences may be more indicative of difficulties linked to the working environment or work-related stress. Thus, the integration of these two items enables a more in-depth and nuanced assessment of the nature and causes of absenteeism within an organization.

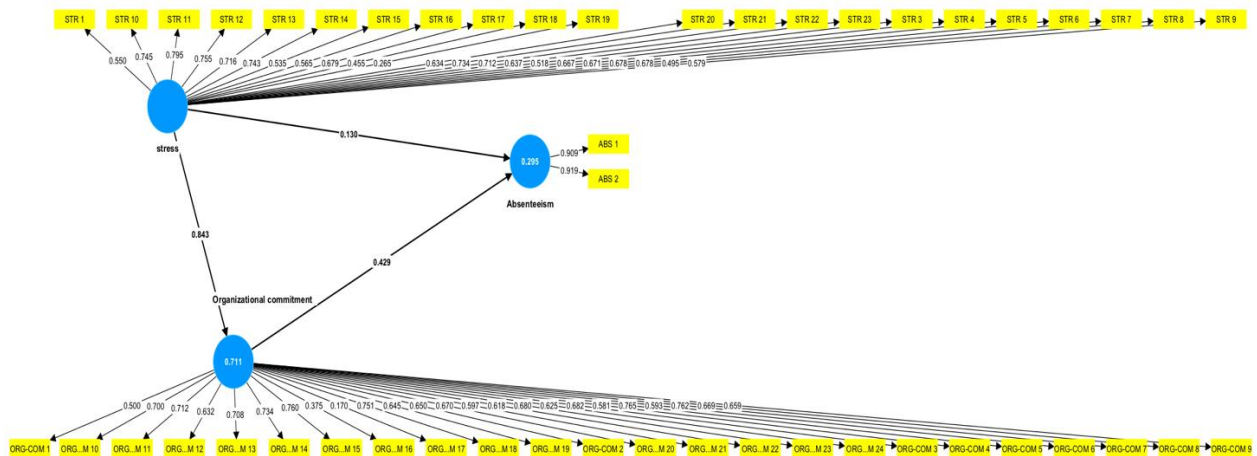
All the scales adopted are five-point Likert-type scales.

4. Results

The hypotheses were tested using the PLS approach. The results of these analyses are presented as follows:

- Evaluation of the measurement model;
- Evaluation of the structural model;
- Examination of the results for the isolated link hypotheses.

Figure 2: Search model before adjustment



Source : Our analyses

Note : PRO-STR : Stress ; ORG-COM : Organizational commitment ; ABS : Absenteeism.

4.1. Measurement model

The measurement model delineates the presumed linear associations between latent and manifest variables. To evaluate the measurement model, existing literature suggests employing three criteria to gauge its quality:

4.1.1. Reliability of the measurement model

Utilizing the Smart PLS software, the reliability of the items is assessed through « loadings» or simple correlations of the measurement indicators while ensuring their alignment with their respective theoretical constructs. Following the guidelines outlined by Chin (1998), standardized loadings are expected to surpass 0.707, indicating that a slightly higher proportion of variance is shared between the construct and its items compared to the variance of the errors (Carmines and Zeller, 1979). Practically, if the estimated model yields loadings below 0.707, consideration is given to eliminating specific items, particularly when utilizing new items or newly developed scales.

Table N° 3: Résultats d'analyse de la fiabilité du modèle de mesure

Variables	Items	Loading	Cronbach's Alpha
Absenteeism	ABS 1	0.924	0.715
	ABS 2	0.832	
Organizational commitment	ORG-COM 3	0.796	0.866
	ORG-COM 6	0.829	
	ORG-COM 8	0.809	
	ORG-COM 17	0.769	

	ORG-COM 21	0.719	
	ORG-COM 22	0.711	
Professional stress	PRO-STR 1	0.788	
	PRO-STR 2	0.825	
	PRO-STR 9	0.920	0.903
	PRO-STR 20	0.857	
	PRO-STR 22	0.849	

Source : Our analyses

4.1.2. Construct Validity

Next, we conducted an evaluation of the construct's validity, which was divided into two levels of analysis as outlined by Hair, Ringle, and Sarstedt (2012): convergent validity and discriminant validity.

• Convergent validity

The assessment of convergent validity in our model begins by examining the significance of each item's contribution to the measurement of the construct. Convergent validity is then evaluated by calculating the average variance extracted (AVE) between a construct and its constituent items. Researchers utilizing Partial Least Squares (PLS) analysis commonly rely on one or two measures of convergent validity, namely Cronbach's alpha and the Fornell-Larcker criterion (1981) for internal consistency. The interpretation of the obtained values aligns closely, and thus, Nunnally's guideline (1978) suggesting a threshold of 0.7 for « modest » composite reliability is often adopted. This criterion is particularly relevant in the initial stages of research. The summarized results are presented in the table below.

Table No. 4: Significance and Composite Reliability (ρ) by construct

	Composite Reliability
Absenteeism	0.782
Organizational commitment	0.875
Professional stress	0.914

Source : Our analyses

• Discriminant validity:

The conventional counterpart to convergent validity is discriminant validity, which is evaluated by comparing the square root of the average variance extracted (AVE) for each latent variable with the squared correlations between latent variables. In the context of Partial Least Squares (PLS) analysis, the criterion for discriminant validity stipulates that a construct should exhibit greater shared

variance with its measurement indicators than with other constructs. The findings of this analysis are detailed in Table 5.

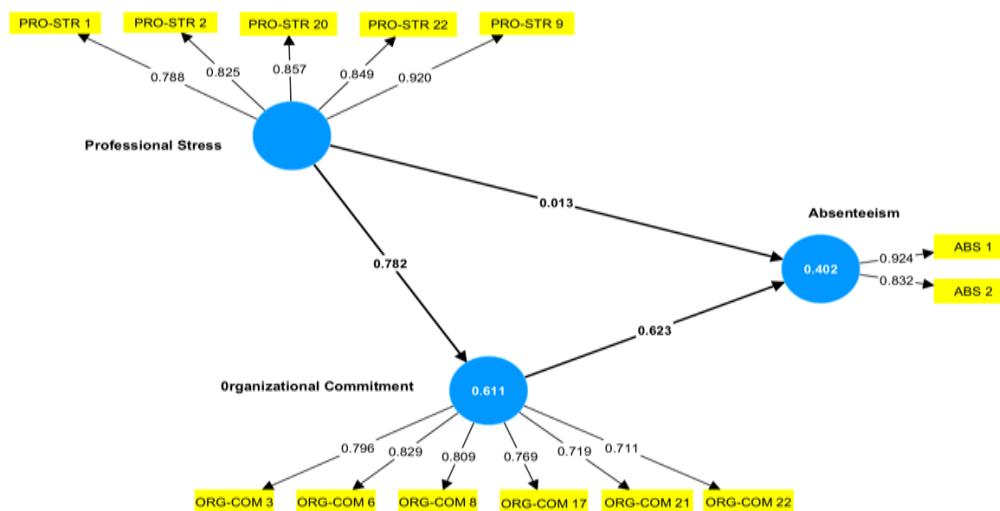
Table No. 5 : Discriminant validity measured by the mean variance extracted (AVE) squared

	Average variance extracted (AVE)	Absenteeism	Organizational commitment	Professional stress
Absenteeism	0.773	0.879		
Organizational commitment	0.598	0.634	0.773	
Professional stress	0.721	0.501	0.782	0.849

Source : Our analyses

Upon examining the results from the table, we observe that the square roots of the average variance extracted (AVE) for each construct are higher than the correlations between the different constructs outside the diagonal. This observation suggests that the elements within a construct significantly contribute to that specific construct but have less impact on the other constructs in the model. Therefore, we conclude that the conditions required to ensure discriminant validity for all construct in our research model are met.

Figure 3 : Research Model after Adjustment



Source : Our analyses

4.2. The evaluation of the structural model:

The structural model, also known as the internal model, represents the relationships between the explanatory latent variables and the explained latent variables. One of the aims of this study is to test a causal order in the relationships between the different constructs. Our tested model underwent an internal evaluation using the « structural scheme» (path weighting scheme) defined by Lohmöller (1989).

To evaluate our structural model, we focus on calculating the following indicators:

- **The coefficient of determination (R^2)**

In the analysis of our data, the first element that draws our attention is the coefficient of determination R^2 . This coefficient plays a crucial role in understanding the relationship between our dependent variables and the explanatory variables included in our models. By providing a measure of the proportion of the variance of the dependent variable that can be explained by the independent variables, R^2 allows us to evaluate the adequacy of our regression models.

When examining the structural model of the Absenteeism variable, we observe a relatively low coefficient of determination of 0.402. This value indicates that professional stress and organizational engagement, although included as explanatory variables, contribute limitedly to explaining the variations in the Absenteeism variable. This observation raises questions about other potential factors that could further influence absenteeism within rural primary public schools.

Conversely, when studying the structural model of the organizational commitment variable, we obtain a higher coefficient of determination of 0.611. This value suggests that professional stress plays a more significant role in explaining variations in organizational engagement. However, it is important to acknowledge that other factors may also influence employees' level of engagement within rural primary public schools., thus warranting further exploration of these aspects.

Below is a representative table of the coefficient of determination (R^2) results:

Table No. 6: coefficient of determination (R^2)

	R-square	R-square adjusted	Interpretation
Absenteeism	0.402	0.388	weak
Organizational commitment	0.611	0.607	Moderate

Source: Our analyses

- **Evaluation of the overall quality of the model**

The findings depicted in Table 7 indicate that the Goodness of Fit (GOF) index surpasses the recommended threshold in the literature, which is set at 30% (Tenenhaus, et al., 2005). This suggests both robust linkages between the measurement constructs and latent variables, as well as strong structural relationships within the model.

$$\text{GOF} = \sqrt{[(0,6973) \times (0,5065)]} = 56,43\%$$

Table No. 7: Assessment of the overall quality of the model

	AVE	R Square
Absenteeism	0,773	
Organizational commitment	0,598	0.402
Professional Stress	0,721	0.611
Sum	2,092	1,013
Average	0,6973	0,5065
Gof	0,5943	

Source: Our analyses

4.3. Examination of the results for the isolated link hypotheses

The structural model, also referred to as the internal model, delineates the connections between latent explanatory variables and latent explained variables. A primary objective of this study is to ascertain a causal order within the relationships among the various constructs. The model under examination was internally evaluated utilizing the path weighting scheme delineated by Lohmöller (1989).

To test the hypotheses within our research model, the first step involved evaluating the significance level of estimation parameters (path coefficients) representing the relationships between latent variables. Following the recommendations of Chin (1998), the bootstrapping resampling technique was employed with a sample size of 500, utilizing SmartPLS software.

4.3.1. Testing of direct hypotheses

H 1: There is a direct and positive relationship between professional stress and absenteeism.

Analysis of the hypothesis gives us a significant positive standard Beta value at the 0.05 threshold, which means that the « **professional stress** » variable has a positive impact on the « **absenteeism** » variable. The standard beta value is 0.037 ($\beta = 0.623$). This means that any increase in « **stress** » of one unit implies an increase of 62.3 %, which confirms our third sub-hypothesis, according to which openness has a positive influence on **absenteeism**.

In conclusion, hypothesis (H 1) is therefore validated.

Table No. 8 : Analysis of the direct link between « professional stress» will have a positive influence on « absenteeism»

Hypothesis	Relation	Std. Beta	Std, Error	T-Statistics	P-Values	Decision
H 1	Professional stress -> absenteeism	0.623	0.138	4.509	0.000	Confirmed *

* The value is significant at the threshold of 0.05

Source : Our analyses

H 2: There is a direct and negative relationship between professional stress and organizational commitment.

Analysis of the hypothesis gives us a significant negative standard Beta value at the 0.05 threshold, which means that the « **professional stress** » variable has a negative impact on the « **organizational commitment** » variable. The standard beta value is -0.783 ($\beta = -0.783$). This means that any increase in « **professional stress** » by one unit implies a decrease of 78,3% in **organizational commitment**, which confirms our first hypothesis that **stress** has a negative influence on **organizational commitment**.

In conclusion, hypothesis (H2) is therefore confirmed.

Table No. 9: Analysis of the direct link between « professional stress » negatively affects « organizational commitment»

Hypothesi	Relation	Std. B	Std, Err	T-Statistic	P-Values	Decision
H 2	Professional stress -> organizational commitment	-0.783	0.037	20.986	0.000	Confirmed *

* The value is significant at the threshold of 0.05

Source: Our analyses

H 3 : « Organizational commitment » and « absenteeism » are directly and negatively correlated.

Analysis of the hypothesis gives us a significant negative standard Beta value at the 0.05 threshold, which means that the « **organizational commitment** » variable has a negative impact on the « **absenteeism**» variable. The standard beta value is -0.498 ($\beta = -0.498$). This means that any increase in **organizational commitment** of one unit implies a decrease in absenteeism of 49,8 % which confirms our second sub-hypothesis, that organizational commitment has a negative influence on absenteeism.

In conclusion, hypothesis (H 3) is therefore validated.

Table No. 10 : Analysis of the direct link between « Organizational commitment» negatively influences « absenteeism»

Hypothesis	Relation	Std. Bet	Std, Err	T-Statistics	P-Values	Decision
H 3	Organizational commitment -> absenteeism	-0.498	0.167	2.989	0.003	Confirmed *

* The value is significant at the threshold of 0.05

Source: Our analyses

The summarized outcomes of the evaluation of structural links pertinent to the formulated research hypotheses (β coefficients, Student's t) are presented in Table 11.

Table No. 11: Estimation of the parameters of the causal model by the bootstrap method « Isolated links »

Hypotheses	Coefficient B	Statistique-t	P values	Conclusion	Status of the hypotheses
H 1: Professional stress \Rightarrow absenteeism	0.623	4.509	0.000	Positive and significant	Confirmed
H 2: Professional stress \Rightarrow organizational commitment	- 0.783	20.986	0.000	Negative and significant	Confirmed
H3 : organizational commitment \Rightarrow absenteeism	- 0.498	2.989	0.003	Negative and significant	Confirmed

Source : Our analyses

4.3.2. Test of the indirect hypothesis (mediating effect of organizational commitment)

Subsequently, the mediation test proves crucial to evaluate the mediating role of organizational commitment in the relationship between professional stress and absenteeism. Thus, this mediation step was carried out using a specific statistical method. This method involves determining the value of VAF (Variance Accounted For), which measures the proportion of variance explained by the relationship between professional stress and absenteeism that is mediated by organizational commitment. To do this, the following formula was used to calculate the VAF:

$$VAF = \frac{\text{Indirect Effect}}{(\text{Indirect Effect} + \text{Direct Effect})}$$

This formula allows for the precise quantification of the contribution of organizational commitment as a mediator in the relationship between professional stress and absenteeism.

The result of this test revealed a VAF of 95.49%, indicating strong mediation. In other words, the majority of the variance in the relationship between professional stress and absenteeism can be explained by organizational commitment.

This result confirms the hypothesis of full mediation, as the VAF value far exceeds the 80 % threshold typically considered indicative of significant mediation. Thus, it is established that organizational commitment plays a central role in how professional stress influences absenteeism within the organization.

Overall, all hypotheses formulated in this study have been validated. The obtained results were in line with statistical requirements, with T statistic values exceeding the critical values from the T

table (T statistic > T table). This reinforces the reliability of the conclusions drawn from this research and underscores the importance of organizational commitment in managing professional stress and absenteeism in the workplace.

$$\text{VAF} = \frac{\text{Indirect Effect}}{(\text{Indirect Effect} + \text{Direct Effect})} = \frac{20,986 \times 2,989}{(20,986 \times 2,989) + (2,958)} = 95,49 \%$$

Table No. 12. Direct Test

Variable	T Statistic	T Table	Result
Professional stress ⇒ absenteeism	2.958	1.96	Supported

Table No. 13. Indirect Test

Variable	T Statistic	T Table	Result
Professional stress ⇒ organizational commitment	20.986	1.96	Supported
organizational commitment ⇒ absenteeism	2.989	1.96	Supported

Source: Our analyses

5. Discussion of the results:

The obtained results led to the conclusion that professional stress has a negative and significant effect on both organizational commitment and absenteeism. Moreover, organizational commitment has been identified as a key mediator in the mechanism of influence of professional stress on absenteeism. This observation suggests that teachers in rural settings, faced with increased stress levels, may experience a certain laxity and disinterest in their work, which could compromise their prior engagement and prompt them to consider absenteeism. These findings confirm theoretical and empirical analyses focused on resources, particularly highlighting the strategic importance of intangible resources and the connections that can be established among these resources (Helfat and Peteraf, 2003).

The correlation between stress and teacher absenteeism is intricate and multi-dimensional, shaped by a variety of factors encompassing individual, organizational, and environmental components. Stress, often triggered by factors like heavy workloads, challenging student behavior, administrative pressures, and resource limitations, holds considerable sway over the physical and mental well-being of teachers.

As stress levels surge, teachers may find themselves contending with burnout, exhaustion, and a diminished capacity to manage the demands inherent in their profession. Consequently, they may

be more prone to taking time off from work as a strategy to cope with their stress or seek relief from challenging circumstances. Research indicates that stress-related absenteeism among teachers can manifest in various forms, spanning from short-term absences like sick days or personal leave to longer-term absences resulting from stress-related illnesses or mental health issues.

Conversely, when teachers experience low levels of job stress, they are more likely to feel satisfied with their work and their workplace environment. They may feel supported, valued, and fulfilled in their roles, which can increase their commitment to the organization (Karacsony, 2019). Low levels of stress can also contribute to a positive work-life balance, allowing teachers to better invest themselves in their professional responsibilities and develop a stronger sense of loyalty and dedication to the organization. These results are in line with previous research conducted by Wibowo et al. (2015), Damrus et al. (2018) and Putri and Martono (2015). Their studies similarly concluded that job stress has a detrimental effect on organizational commitment. In other words, when individuals experience higher levels of job stress, their commitment to the organization tends to decrease.

In the current stressful environment, absenteeism often serves as a gauge of dysfunction and the overall well-being, or lack thereof, within rural school settings. It manifests as a reactive and subjective response by individuals, indicative of underlying issues within the system. This behavior is symptomatic of a pathological condition, as described by Amorin (1997), stemming from a gradual disengagement and leniency resulting from insufficient encouragement, motivation, and recognition in the workplace. Consequently, there is a concerning decline in the effective organization of work and the standard of education in rural public primary schools. These findings contradict the conclusions of Jacobsen and Fjeldbraaten (2020), who argue that organizational commitment has no negative impact on absenteeism.

Conclusion

The results obtained from this research shed light on the profound effect that job stress exerts on the organizational commitment of teachers. Furthermore, the study highlights the pivotal role played by organizational commitment as a mediator in the intricate relationship between job stress and absenteeism. This suggests that the level of commitment that teachers feel towards their organization significantly influences how job stress impacts their attendance and overall well-being. In essence, the findings underscore the complex interplay between job stress, organizational commitment, and absenteeism among teachers, emphasizing the importance of addressing these factors to promote a healthier and more productive work environment.

In conclusion, professional stress among teachers represents a complex challenge that requires a comprehensive approach and targeted interventions. By identifying underlying causes, understanding consequences, and implementing appropriate measures, it is possible to create a professional environment conducive to teacher well-being, thereby fostering quality education. The search for potential levers to mitigate the adverse effects of professional stress on absenteeism relies on organizational interventions and human resource management policies.

Thus, the identification of potential levers to mitigate the detrimental effects of burnout on organizational engagement relies on organizational interventions and human resource management policies, including:

- **Understand the root causes of absenteeism:** It's essential to conduct surveys, interviews, or focus groups to identify the underlying reasons for teacher absenteeism in your educational institution. This may include factors such as workload, stress, job dissatisfaction, lack of support, or personal issues.
- **Enhance organizational commitment:** Invest in initiatives that foster a sense of belonging and loyalty among teachers towards the school or educational institution. This can be achieved through transparent communication, recognition programs, professional development opportunities, and involvement in decision-making processes.
- **Promote work-life balance:** Recognize the importance of teachers' well-being by encouraging a healthy work-life balance. Implement policies that allow for flexible scheduling, reasonable workloads, and adequate time off to recharge and address personal needs.
- **Provide adequate support:** Offer comprehensive support systems for teachers, including access to counseling services, mentoring programs, and resources for managing stress and workload. Ensure that teachers feel valued, supported, and empowered to seek help when needed.
- **Foster a positive school culture:** Cultivate a positive and inclusive school culture where mutual respect, collaboration, and teamwork are valued. Encourage open communication, constructive feedback, and opportunities for professional growth and development.

By adopting a holistic approach that incorporates these levers, rural public primary schools can contribute to reducing teachers' professional stress, strengthening their organizational commitment, and consequently, mitigating the frequency of their absenteeism.

However, every research has its limitations. This article identifies two shortcomings that could open up avenues for future research and, consequently, deepen our understanding of the issue. Firstly, the

number of responses obtained in the survey is relatively modest. A larger number of responses would likely yield more precise results, thus future research could replicate this study.

Furthermore, given that this study focuses only on teachers in rural areas, the results and conclusions drawn from this research are representative of a single region in Morocco and may not apply to other geographical regions. Future studies could also examine the proposed relationships in a different context, such as the private sector.

BIBLIOGRAPHIE

- Bakker, A., Demerouti, E., & Schaufeli, W. (2003). Dual processes at work in a call centre: An application of the job demands–resources model. *European Journal of work and organizational psychology*, 12(4), 393-417.
- Bernaldo-De-Quirós, M., Piccini, A. T., Gómez, M. M., & Cerdeira, J. C. (2015). Psychological consequences of aggression in pre-hospital emergency care: Cross sectional survey. *International journal of nursing studies*, 52(1), 260-270.
- Bourbonnais, R., & Mondor, M. (2001). Job strain and sickness absence among nurses in the province of Quebec. *American journal of industrial medicine*, 39(2), 194-202.
- Bouville, G. (2009). L'influence de l'organisation et des conditions de travail sur l'absentéisme. Analyse quantitative et étude de cas. HAL Post-Print, (hal-00653592).
- Carmines, E. G., & Zeller, R. A. (1979). Reliability and validity assessment. Sage publications.
- Carrier-Vernhet, A. C. (2012). *Implication organisationnelle et épuisement professionnel: une analyse par la théorie de la conservation des ressources* (Doctoral dissertation, Université de Grenoble).
- Chadwick-Jones, J. K., Nicholson, N., & Brown, C. (1982). Social psychology of absenteeism. (*No Title*).
- Chini, B. (2003). Les facteurs de stress professionnel. Enquête auprès de salariés des services interentreprises. *Archives des maladies professionnelles et de médecine du travail*, 64(5), 297-309.
- Daniel, C. O. (2019). Effects of job stress on employee's performance. *International Journal of Business, Management and Social Research*, 6(2), 375-382.
- De Jong, J. T., Komproe, I. H., Van Ommeren, M., El Masri, M., Araya, M., Khaled, N., ... & Somasundaram, D. (2001). Lifetime events and posttraumatic stress disorder in 4 postconflict settings. *Jama*, 286(5), 555-562.
- Ekawarna, E. (2018). Manajemen konflik dan stres.
- Fornell, C. et Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.
- Gamassou, C. E. (2005). Ressources sociales et stress dans la fonction publique territoriale. *STRESS, BURNOUT ET CONFLITS DE ROLES*.
- Gede, I. K., Dewi, P. A. T., Mahayasa, I. G. A., Wahyuni, N. N. T., & Pratama, O. S. (2023). Job satisfaction mediates the effect of job stress on organizational commitment. *World Journal of Advanced Research and Reviews*, 18(2), 927-935.
- Gintrac 1, A. (2011). Le stress au travail, un état des lieux. *Revue Management et avenir*, (1), 89-106.
- Hair, J. F., Ringle, C. M. et Sarstedt, M. (2012). Partial least squares: the better approach to structural equation modeling?. *Long Range Planning*, 45(5-6), pp. 312-319.
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic management journal*, 24(10), 997-1010.
- Huhtala, M., & Feldt, T. (2016). The path from ethical organisational culture to employee commitment: Mediating roles of value congruence and work engagement. *Scandinavian Journal of Work and Organizational Psychology*, 1(1).
- Imran, M., Ali, L., & Khan, M. T. (2022). Factors Affecting Employee Absenteeism at Workplace: Moderating Effect of Supervisor Support. *Open Access Organization and Management Review*, 1(1), 54-66.

- Jacobsen, D. I., & Fjeldbraaten, E. M. (2020). Exploring the links between part-time employment and absenteeism: the mediating roles of organizational commitment and work-family conflict. *Public Organization Review*, 20, 129-143.
- Jamal, M. (2007). Job stress and job performance controversy revisited: An empirical examination in two countries. *International journal of stress management*, 14(2), 175.
- Johns, G. (2002). Absenteeism and mental health. *Handbook of mental health in the workplace*, 437-455.
- Karacsony, P. (2019, May). Examining the Relationship Between Workplace Stress and Organizational Commitment. In *Proceedings of the 2019 International Conference on Management Science and Industrial Engineering* (pp. 26-30).
- Karim, F., & Rehman, O. (2012). Impact of job satisfaction, perceived organizational justice and employee empowerment on organizational commitment in semi-government organizations of Pakistan. *Journal of Business Studies Quarterly*, 3(4), 92.
- Légeron 1, P. (2008). Le stress professionnel. *L'information psychiatrique*, (9), 809-820.
- Lohmöller, J. B. (1989). Predictive vs. structural modeling: Pls vs. ml. In *Latent variable path modeling with partial least squares*, pp. 199-226.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological bulletin*, 108(2), 171.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological bulletin*, 108(2), 171
- McElroy, J. C., Morrow, P. C., Power, M. L., & Iqbal, Z. (1993). Commitment and insurance agents' job perceptions, attitudes, and performance. *Journal of Risk and Insurance*, 363-384.
- Meyer J P, Stanley D J, Herscovitch L and Topolnytsky L (2002), « Affective, Continuance and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences», *Journal of Vocational Behavior*, Vol. 61, pp. 20-52.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of applied psychology*, 78(4), 538.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior*, 61(1), 20-52.
- Montano, M. D. L. N. V. (2023). A comprehensive approach to the impact of job stress on women in the teaching profession. *Interdisciplinary Rehabilitation/Rehabilitacion Interdisciplinaria*, 3, 56-56.
- Moreau, E., & Mageau, G. A. (2012). The importance of perceived autonomy support for the psychological health and work satisfaction of health professionals: Not only supervisors count, colleagues too!. *Motivation and Emotion*, 36, 268-286.
- Moreau, M., Valente, F., Mak, R., Pelfrene, E., De Smet, P., De Backer, G., & Kornitzer, M. (2004). Occupational stress and incidence of sick leave in the Belgian workforce: the Belstress study. *Journal of epidemiology & community health*, 58(6), 507-516.
- Naik, B. S., Sarma, M. P. G., & Krishna, B. J. (2023). AN ANALYTICAL STUDY ON EMPLOYEE ABSENTEEISM IN THE WORKPLACE WITH REFERENCE TO WIPRO TECHNOLOGIES LIMITED, BANGALORE. *Management Research*, 10(3), 33-41.
- Ndao, A., & Diop, B. (2008). Les causes de l'absentéisme dans les entreprises sénégalaises: le cas des Industries Chimiques du Sénégal (ICS).

- Niedhammer, I., Goldberg, M., Leclerc, A., Bugel, I., & David, S. (1998). Psychosocial factors at work and subsequent depressive symptoms in the Gazel cohort. *Scandinavian journal of work, environment & health*, 197-205.
- Ouazoul, A., & Jemjami, N. (2022). Le Stress et l'épuisement professionnel chez les enseignants de l'éducation physique et sportive au Maroc: Cas des enseignants de l'Académie régionale de l'éducation et la de formation de Béni Mellal-Khenifra. *Revue Internationale des Sciences de Gestion*, 5(4).
- Pieters, W. R., Van Zyl, E., & Nel, P. (2019). Job attitudes as a predictor of work engagement of the lecturing staff at the University of Namibia. *SA Journal of Human Resource Management*, 17(1), 1-11.
- Putri, G. R., & Martono, S. (2015). Pengaruh karakteristik pekerjaan, pengembangan karir dan stres kerja terhadap komitmen organisasional. *Management Analysis Journal*, 4(4).
- Randon 1, S., Baret 2, C., & Prioul 3, C. (2011). La prévention de l'absentéisme du personnel soignant en gériatrie: du savoir académique à l'action managériale. *Revue management et avenir*, (9), 133-149.
- Rifa'i, A. A. (2023). Impact of Work Discipline on Employee Performance. *JURNAL EMA*, 1(01), 1-8.
- Sandrin, E., & Gillet, N. (2016). Validation d'une version française de la Dutch Work Addiction Scale (DUWAS). *Psychologie du Travail et des Organisations*, 22(3), 147-159.
- Schaubroeck, J., Cotton, J. L., & Jennings, K. R. (1989). Antecedents and consequences of role stress: A covariance structure analysis. *Journal of Organizational Behavior*, 10(1), 35-58.
- Schultz, P. H., & Gault, D. E. (1990). Prolonged global catastrophes from oblique impacts.
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of occupational health psychology*, 1(1), 27.
- Sitarević, A., Nešić Tomašević, A., Sofić, A., Banjac, N., & Novaković, N. (2023). The Psychosocial Model of Absenteeism: Transition from 4.0 to 5.0. *Behavioral Sciences*, 13(4), 332.
- Soulimani, R. (2002). Stress et maladie. *Traité de psychologie de la santé*, 91-115.
- Steers, R. M., & Rhodes, S. R. (1978). Major influences on employee attendance: A process model. *Journal of applied Psychology*, 63(4), 391.
- Summers, T. P., & Hendrix, W. H. (1991). Modelling the role of pay equity perceptions: A field study. *Journal of Occupational Psychology*, 64(2), 145-157.
- Sutiye, S., Trismiyanti, D., Linda, M. R., Yonita, R., & Suheri, S. (2020). The impact of job satisfaction and employee engagement on organizational commitment. *Dinasti International Journal of Education Management And Social Science*, 2(1), 55-66.
- Veil, C. (2012). Vulnérabilités au travail. *Naissance et actualité de la psychopathologie du*.
- Weiss, A. (1985). The effect of job complexity on job satisfaction: Evidence from turnover and absenteeism.
- Yusuf, R. M., & Syarif, D. (2018). *Komitmen organisasi*. Nas Media Pustaka.
- Yüzbaşıoğlu, N., & Doğan, O. (2018). Relationship between paternalistic leadership and organizational commitment in hospitality industry: Case of Antalya, Turkey. *Academic Journal of Interdisciplinary Studies*, 7(1), 163-173.