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	Title of research article  The Role of Colleague and Supervisor Support in Reducing Job Burnout
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Abstract This study addresses the role of colleague and supervisor support in reducing job burnout with its dimensions (emotional exhaustion, depersonalization, and reduced personal accomplishment) among administrative staff at the Tamda University Campus of Mouloud Mammeri University in Tizi Ouzou - Algeria. The sample consisted of 97 employees out of 131 questionnaires distributed through a comprehensive survey. The Maslach Burnout Inventory, adapted to the Algerian context by Roukia Nebbar and Jaïja Amar (2018), as well as the support scales (Eisenberger for supervisors and Tang for colleagues), were used. Data were analyzed using PLS regression analysis, and the results were as follows: • Colleague support contributes to reducing both emotional exhaustion and depersonalization. • Colleague support does not contribute to reducing reduced personal accomplishment. • Supervisor support does not contribute to reducing either emotional exhaustion or depersonalization. • Supervisor support contributes to reducing reduced personal accomplishment.	
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1- Introduction: Work constitutes a central element in shaping an individual's identity, satisfying their needs, and providing both social and self-esteem. It is a source of stability, whether material or social, by granting the individual a position in society. However, the professional environment is not free of challenges, such as increasing workloads, role ambiguity, and difficulties balancing work and social life. These challenges may lead to job burnout, which Singh et al. (2012) define as *"a psychological phenomenon that reduces employees' motivation and productivity, and is a source of concern for management and the organization as a whole"* (Singh et al., 2012). Burnout has received considerable scholarly attention, as highlighted by Cordes and Dougherty (1993). According to Shepherd et al. (2011) and Yiu et al. (2001), burnout affects employees, leading to absenteeism and lower quality in customer service. Furthermore, burnout increases the likelihood of depression and other health problems (Tourigny et al., 2010).

Here emerges the role of social support in the workplace as an effective protective factor, specifically in two dimensions: colleague support and supervisor support. Researchers have confirmed that these two dimensions represent vital indicators of burnout (Halbesleben & Buckley, 2004). Previous studies, such as Mayo et al. (2012), suggest that support from supervisors and colleagues not only mitigates negative job outcomes but also enhances employees' psychological well-being and performance (Mayo et al., 2012).

The contribution of social support to burnout can be explained through the Job Demands-Resources (JD-R) model. According to this model, job demands refer to physical, psychological, social, or organizational aspects of the job that generate psychological stress for employees, such as heavy workloads, role conflict, and unsafe working conditions. Conversely, job resources refer to factors—whether physical, psychological, social, or organizational—that help employees achieve their work goals, such as job autonomy, flexible scheduling, and social support (Demerouti et al., 2001). Co-workers and supervisors, according to Halbesleben and Buckley (2004), are significant contributors in determining whether or not employees experience burnout. They also play a role in promoting employees' well-being and performance (Mayo et al., 2012; Sloan, 2012).

Specifically, emotional support from colleagues, manifested in empathy and care, can significantly reduce emotional exhaustion and depersonalization. Beehr et al. (2000) noted that communication among employees—whether work-related or non-work-related—can help alleviate negative feelings in the workplace. Furthermore, friendly relationships among employees foster trust and compassion (Halbesleben & Wheeler, 2012), which encourage them to enhance their peers' emotional and psychological well-being (McGuire, 2007; Sloan, 2012).

Similarly, supervisors influence employees' level of burnout. Studies have shown that supervisors affect employees' attitudes and behaviors (Liaw et al., 2010). More importantly, supervisors hold discretionary authority over resource allocation and therefore play a central role in shaping employees' work. Lankau and Thomas (2009) argue that supervisor support, through communication and information sharing, reduces role ambiguity and consequently helps employees experience less work-related stress (Lankau & Thomas, 2009).

Most previous studies have integrated the three burnout dimensions—emotional exhaustion, depersonalization, and reduced personal accomplishment—into a single measure, using it as a dependent variable (Blanch & Aluja, 2012). However, scholars argue that burnout should be treated as a multidimensional construct (Maslach et al., Golembiewski). Conversely, Aluja and Blanch (2012) found that supervisor support had an inverse relationship with burnout among Spanish workers, while colleague support reduced stress levels (Sloan, 2012). Yet, colleague support was found to reduce only depersonalization, not emotional exhaustion or reduced personal accomplishment, and no statistical significance was reported across the three burnout dimensions (Sundin et al., 2011; Aluja & Blanch, 2012). In contrast, Sochos et al. (2012) found that supervisor support and burnout dimensions had effects opposite to those of colleague support.

Demerouti et al. (2001) point out that *"colleagues and supervisors exert a substantial influence on employee performance in the workplace. Thus, the quality of the relationships employees develop with their peers and supervisors can significantly affect the level of burnout they experience."* According to the JD-R model, burnout is more likely when employees lack sufficient resources to cope with high job demands. Hence, colleague and supervisor support represent critical job resources that enable employees to manage high work demands.

In the context of institutions in general, and universities in particular, administrative staff face multiple and unique stressors compared to other organizations. Their responsibilities include dealing with students, faculty members, regulations, and constant organizational changes—all of which contribute to burnout. Furthermore, administrative staff in Algerian universities fall under the “common corps” of civil service regulations, whereas professors are subject to different regulations, salaries, and classifications. In addition, professors often hold administrative responsibilities (e.g., department head, deputy, dean, vice-dean, rector, or vice-rector), alongside their teaching duties, as outlined by Algerian regulations (Official Journal of Algeria, 2016).

Based on the aforementioned studies regarding burnout and the mitigating role of colleague and supervisor support for administrative staff—and considering the mixed findings in the literature—the following research question arises:

Do colleague and supervisor support help reduce the three dimensions of burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) among administrative staff at the Tamda Campus of Mouloud Mammeri University in Tizi Ouzou, Algeria?

This leads us to two main research questions:

- Does colleague support reduce burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) among administrative staff at the Tamda Campus of Mouloud Mammeri University in Tizi Ouzou?
- Does supervisor support reduce burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) among administrative staff at the Tamda Campus of Mouloud Mammeri University in Tizi Ouzou?

From these, several sub-questions emerge:

- Does colleague support reduce emotional exhaustion?
- Does colleague support reduce depersonalization?
- Does colleague support reduce reduced personal accomplishment?
- Does supervisor support reduce emotional exhaustion?
- Does supervisor support reduce depersonalization?
- Does supervisor support reduce reduced personal accomplishment?

2- Research Hypotheses:

2.1. Main Hypotheses:

2.1.1. First Main Hypothesis:

- Colleague support contributes to reducing burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) among administrative staff at the Tamda Campus of Mouloud Mammeri University in Tizi Ouzou.

2.1.2. Second Main Hypothesis:

- Supervisor support contributes to reducing burnout (emotional exhaustion, depersonalization, and reduced personal accomplishment) among administrative staff at the Tamda Campus of Mouloud Mammeri University in Tizi Ouzou.

2.2. Sub-Hypotheses:

2.2.1. Sub-Hypotheses Related to the First Main Hypothesis:

- Colleague support contributes to reducing emotional exhaustion.
- Colleague support contributes to reducing depersonalization.
- Colleague support contributes to reducing reduced personal accomplishment.

2.2.2. Sub-Hypotheses Related to the Second Main Hypothesis:

- Supervisor support contributes to reducing emotional exhaustion.
- Supervisor support contributes to reducing depersonalization.
- Supervisor support contributes to reducing reduced personal accomplishment.

3- Study Terminology

3.1. Job Burnout: Job burnout is defined as *“a psychological phenomenon that reduces employees’ motivation and productivity, and is a source of concern for management and the organization as a whole”* (Singh et al., 2012). The roots of this concept go back to Herbert Freudenberger (1974), who described burnout as *“a negative psychological state resulting from prolonged exposure to occupational stress”* (Freudenberger, 1974). Since then, burnout has become a central topic of study across various professional fields.

Burnout is a negative, multidimensional psychological phenomenon, and it poses a major challenge for organizations due to its negative effects on employees’ performance, job satisfaction, and overall health. Research has largely focused on the multidimensional model proposed by Maslach and colleagues, which divides burnout into three core dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981; Maslach & Leiter, 2008; Blanch & Aluja, 2012).

In this study, burnout is measured through the Maslach Burnout Inventory (1996), translated into Arabic and adapted to the Algerian context by Nebbar and Jaïjaï (2018) in a study conducted on nurses. The inventory includes three main dimensions:

- **Emotional Exhaustion:** feelings of fatigue, strain, and depletion due to work and insufficient resources.
- **Depersonalization:** feelings of cynicism, indifference, and detachment from others in the workplace.
- **Reduced Personal Accomplishment:** feelings of inefficacy, low productivity, and diminished confidence in one’s ability to accomplish assigned tasks (Nebbar & Jaïjaï, 2018).

3.2. Social Support: Social support is considered one of the most important job resources that can alleviate work stress and enhance psychological well-being (Demerouti et al., 2001).

Sidney Cobb (1976) defined social support as *“information leading the individual to believe that he or she is cared for and loved, esteemed and valued, and a member of a network of mutual obligations”* (Cobb, 1976, p. 300). This definition emphasizes that social support is not limited to tangible assistance but also includes the perceptual and emotional aspects of feeling safe and appreciated.

James House (1981) expanded on this by defining social support as *“a set of emotional, instrumental, informational, and appraisal resources provided by others within social relationships”* (House, 1981).

This study specifically focuses on workplace social support as a major protective factor, with an emphasis on two dimensions: colleague support and supervisor support. These dimensions are considered vital indicators of burnout (Halbesleben & Buckley, 2004).

In summary, social support refers to the resources and assistance an individual receives from their social network (family, friends, colleagues, or the broader community). It includes not only material help but also emotional and psychological aspects, which are essential for strengthening mental health and coping with stressors.

3.3. Colleague Support: Colleague support is the assistance an employee receives from peers at the same hierarchical level, including:

- **Emotional Support:** empathy, encouragement, and listening to work-related problems.
- **Instrumental/Performance Support:** help with tasks or sharing experiences to solve problems (Mayo et al., 2012).

3.4. Supervisor Support: Supervisor support is the assistance provided by a manager or direct supervisor. It comes from an authority figure and includes:

- **Material Support:** providing necessary resources, setting realistic goals, and clarifying roles and responsibilities.
- **Appraisal Support:** recognizing efforts and achievements, and offering constructive feedback (Mayo et al., 2012).

Previous research suggests that both supervisor and colleague support not only reduce the negative effects of job demands but also enhance employees' psychological well-being and performance (Mayo et al., 2012).

3.5. University Administrative Staff: According to Algerian public service regulations, administrative staff in public institutions belong to the following branches (Official Journal of Algeria, 2016):

- **General Administration:** administrators, assistant administrators, clerks, and administrative accountants.
- **Translation:** translators and interpreters.
- **Information Technology:** engineers, technicians, assistant technicians, and technical staff.
- **Statistics:** statistical engineers, statistical technicians, assistant technicians, and technical staff in statistics.
- **Documentation and Archives:** archivists, assistant archivists, librarians, and documentation staff.

In Algerian universities, administrative staff are employees working in various administrative, technical, and service departments, excluding teaching staff (research professors). They hold permanent positions under the general administrative framework, ensuring the smooth operation of university services and the fulfillment of institutional objectives. In this study, the focus is on the administrative staff of the Tamda Campus, Mouloud Mammeri University, Tizi Ouzou.

4- Types of Social Support: House (1981) emphasized four types of social support—emotional, instrumental, informational, and appraisal—adding appraisal to earlier classifications. This typology is now the basis for most studies on social support:

- **Emotional Support:** feelings of care and affection.
- **Informational Support:** advice and guidance.
- **Instrumental/Practical Support:** tangible, hands-on help.

- **Appraisal Support:** positive evaluation or constructive feedback that enhances self-confidence (House, 1981).

5- Importance of Social Support in the Workplace: Social support is considered a powerful tool for improving the work environment and enhancing employee performance. Its importance can be summarized as follows:

- **Reducing Work Stress:** acts as a buffer against the negative effects of job stress (Viswesvaran et al., 1999).
- **Increasing Job Satisfaction and Organizational Commitment:** a strong support network boosts job satisfaction and employee commitment (Rhoades & Eisenberger, 2002).
- **Improving Job Performance:** especially through informational and practical support, it helps employees develop skills and overcome challenges, leading to improved performance and productivity (Bakker & Demerouti, 2017).
- **Enhancing Self-Confidence and Resilience:** strengthens employees' capacity to cope with difficulties and setbacks.
- **Building Positive Relationships:** fosters stronger and more positive ties between colleagues and supervisors (Dori et al., 2009).

6- Methodology and Tools

6.1. Study Population and Sample: To achieve the study's objectives, the sample consisted of nearly all administrative staff at the Tamda Campus, Mouloud Mammeri University, Tizi Ouzou. A total of 131 questionnaires were distributed, accompanied by cover letters addressed to supervisors in each department, asking them to encourage their staff to complete the survey. After several weeks, 97 fully completed questionnaires were returned, representing a response rate of 74%.

6.2. Instruments and Scales:

- **Burnout Scale:** The Maslach Burnout Inventory (Maslach et al., 1996), adapted to the Algerian context by Nebbar and Jaijaï (2018), consisting of 16 items: five for emotional exhaustion, five for depersonalization, and six for reduced personal accomplishment. Items were rated on a 5-point Likert scale ranging from 1 (Never) to 5 (Always).
- **Supervisor Support Scale:** Eisenberger et al.'s (1986) four-item scale.
- **Colleague Support Scale:** Tang's (1998) eight-item scale. Both scales were measured using a 5-point Likert scale (1 = Never, 5 = Always).

6.3. Statistical Methods: The study employed **Partial Least Squares (PLS) regression analysis**, conducted using WarpPLS 3.0 software (Kock, 2012).

Before estimating the PLS model, preliminary analyses were carried out:

- **Construct Reliability:** assessed using Cronbach's alpha, with all values exceeding the recommended threshold of 0.7 (Fornell & Larcker, 1981).
- **Convergent Validity:** tested using factor loadings, all of which exceeded 0.5, as recommended by Hair et al. (2009).
- **Discriminant Validity:** assessed through Average Variance Extracted (AVE). Following Fornell and Larcker (1981), the square root of AVE for each construct was greater than its correlations with other constructs, confirming discriminant validity.

- **Multicollinearity:** tested using Variance Inflation Factor (VIF). Values ranged from 1.43 to 3.18, well below the critical threshold of 3.3 (Petter et al., 2007).

7- Results and Discussion

7.1. The Contribution of Colleague Support and Job Burnout Dimensions:

Regarding the contribution of colleague support to the three dimensions of burnout, the results showed that colleague support negatively contributed to emotional exhaustion ($\beta = -0.394$, $p < 0.05$) and depersonalization ($\beta = -0.396$, $p < 0.05$). However, the contribution was not statistically significant concerning reduced personal accomplishment ($\beta = -0.119$, $p = 0.254$). Accordingly, the first and second sub-hypotheses were supported, while the third sub-hypothesis was not supported.

7.2. The Contribution of Supervisor Support and Job Burnout Dimensions:

As for the contribution of supervisor support to the three dimensions of burnout, the results showed that supervisor support negatively contributed to emotional exhaustion ($\beta = -0.135$, $p = 0.195$), depersonalization ($\beta = -0.178$, $p = 0.203$), and reduced personal accomplishment ($\beta = -0.40$, $p < 0.05$). However, the contribution was statistically significant only regarding reduced personal accomplishment. Accordingly, the sixth sub-hypothesis was supported, while the fourth and fifth sub-hypotheses were not supported.

7.3. Interpretation and Discussion of the Results: This study aimed to test the role of colleague and supervisor support on the three dimensions of job burnout. The results of the Partial Least Squares (PLS) analysis supported the initial expectations. It was found that both colleague support and supervisor support tend to reduce employees' feelings of burnout.

These findings are consistent with existing literature that points to social support as a solution to help employees effectively cope with work-related stress (Halbesleben & Buckley, 2004; Sochos et al., 2012). However, we also found that the degree of support perceived by employees from different organizational sources tends to help reduce different types of burnout.

Specifically, the results indicated that colleague support significantly helped employees experience reduced emotional exhaustion and depersonalization. In contrast, supervisor support significantly helped employees feel more confident in their ability to achieve work-related goals concerning personal accomplishment.

These results support our expectations that:

- Managers strongly influence employees' career progress; therefore, a lack of support from managers may lead employees to lose motivation to achieve high performance.
- Colleagues maintain close personal relationships with employees; hence, a lack of colleague support may cause employees to feel isolated and unmotivated to attend work.
- Overall, these results provide an important contribution to current research by offering this empirical evidence.

8- Conclusion: Based on this study, we find that there are managerial implications derived from our results. Given the severe consequences of burnout on employees' productivity and performance, it is crucial for organizations to implement appropriate policies to prevent employees from experiencing burnout.

Organizations need to ensure that employees receive sufficient support from both their colleagues and supervisors. For example, job designs that require teamwork, along with compensation systems based on team performance, can enable employees to collaborate more effectively with each other (Bamberger & Levi, 2009), thereby encouraging them to develop closer personal relationships.

Similarly, it is essential for managers to provide adequate support to their employees to help them develop strong self-confidence. For instance, leadership techniques such as management coaching can be applied to help employees enhance their self-efficacy (Baron & Morin, 2010), which in turn helps build confidence regarding their job performance.

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