

# Occupational Stress and Smartphone-Mediated Coping Strategies Among Employees in Selected Work Industries in Laguna

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## Abstract

The Philippines is among the most digitally active countries in the world, with Filipinos spending extensive time online mainly through smartphones for communication, entertainment, and social media. This high digital engagement has made smartphone use part of daily life, where it may even function as a coping tool for occupational stress. However, the relationship between smartphone use and stress management among employees remains underexplored, especially across different demographic groups in the Philippines. To examine this gap, this study looked at occupational stress and smartphone-mediated coping strategies among employees in various work industries in Laguna, Philippines. It aims to assess stress levels, determine the extent of smartphone use for coping, and identify differences across demographic variables. A quantitative descriptive-comparative and correlational design was used, involving 136 employees, mostly young adults, females, single, and working in service and administrative roles.

Findings showed generally low occupational stress across workmate, supervisory, task, and client-related dimensions. Despite this, smartphones were used extensively for coping, especially for entertainment, music, social connection, and emotional support. A weak but significant positive relationship ( $r = 0.2993$ ,  $p = 0.0004$ ) was found between stress and smartphone use, with differences across demographics. Overall, smartphones serve as supplementary coping resources in workplace stress management.

**Keywords:** *employees, occupational stress, smartphone-mediated coping strategies, work industries, workplace stress, sustainable development goals (SDGs), SDG 3*

## INTRODUCTION

The Philippines is among the most digitally active countries in the world, with a high level of internet and smartphone usage integrated into daily life. According to the Congressional Policy and Budget Research Department (2024), Filipinos are highly engaged in mobile-based internet activities, placing the country alongside Indonesia as one of the leading nations in mobile web browsing preference.

Recent data further show that approximately 89% of Filipinos have access to the internet, and 81.9% use social media regularly, making it the primary reason for being online, with continued growth expected in the coming years (Meltwater, 2025; Statista, 2025). In addition, We Are Social and Meltwater (2025) reported that around 98 million Filipinos, representing roughly 84% of the national population (UNFPA, n.d.), spend an average of 33 hours and 50 minutes per week online, or about 8 hours and 52 minutes daily, which is significantly higher than the global average of 6 hours and 38 minutes (Tribune, 2025). Much of this digital engagement is driven by smartphone use, particularly for platforms such as Facebook, TikTok, and Instagram, alongside activities like video streaming and online gaming (DataReportal, 2026).

Smartphone use can be a tool that can be used to improve one's well-being depending on the personality of the user, how it is used, and the duration of usage, making a single conclusion not applicable for generalization since its impact is context dependent (Kushlev & Leitao, 2020; Sorokowski & Sobczak, 2025). It can be a means of accessing various resources for perceived coping efficacy for stress when the individual is engaging with useful apps or positive content (Wolfers et al., 2023).

Occupational stress among employees has become a growing concern across various industries, as workplace demands, interpersonal challenges, task pressures, and client-related responsibilities continue to affect employee well-being. However, limited attention has been given to how employees from different demographic backgrounds differ in their levels of occupational stress and in their use of smartphone-mediated coping strategies. Furthermore, little is known about whether smartphone use as a coping mechanism is associated with higher or lower levels of occupational stress in a workplace setting, especially in Laguna.

Laguna is one of the country's major economic centers and the largest provincial economy in CALABARZON, with economic activities spanning manufacturing, trade, finance, construction, accommodation and food services, and other service industries (Philippine Statistics Authority, 2024; Philippine News Agency, 2024). This diverse industrial landscape makes Laguna an appropriate locale for examining occupational stress and smartphone-mediated coping because employees are exposed to varying workplace demands, organizational cultures, and job responsibilities.

Comparing employees across industries is essential because the nature of work, work environment, workload, and interpersonal demands differ from one industry to another, potentially influencing both occupational stress and the ways employees use smartphones as coping mechanisms. As the effectiveness and impact of smartphone use depend on the context in which it is used, employees from different industries may vary in how they utilize smartphones

to cope with work-related stress and access coping resources (Wolfers & Yang, 2025; Sorokowski & Sobczak, 2025). Given these potential differences, this study seeks to examine occupational stress levels and smartphone-mediated coping strategies among employees across various work industries by describing their demographic profile, determining the level of occupational stress across different domains, and assessing the extent of smartphone-mediated coping strategies.

In addition, the study will test whether significant differences exist in occupational stress and coping strategies when respondents are grouped according to demographic variables, and whether a significant relationship exists between occupational stress and smartphone-mediated coping strategies.

By providing empirical evidence on these relationships, the study intends to contribute to a better understanding of how employees use smartphones in managing occupational stress. The findings may also serve as a basis for developing workplace interventions and employee wellness programs that promote healthier coping mechanisms in the digital age.

## METHODOLOGY

This chapter explains how the study will be conducted. It covers the research design, participant selection, and data collection. It also provides the list of instruments used during the treatment. Lastly, it gives an overview of how the data will be analyzed, scored, and interpreted to form informed conclusions.

### Research Design

This study employed a quantitative research approach utilizing a descriptive-comparative and correlational research design to examine occupational stress and smartphone-mediated coping strategies among employees across different work industries.

A quantitative approach was deemed appropriate because the study sought to gather numerical data that could be statistically analyzed to describe, compare, and determine the relationship between the variables under investigation. This approach enabled the researchers to objectively measure the variables and draw conclusions based on empirical evidence obtained from the respondents.

Specifically, the study utilized a descriptive research design to provide a detailed description of the respondents' demographic profile in terms of age, gender, civil status, work industry, and employee classification level. Likewise, it was used to determine the level of occupational stress experienced by employees and the extent to which they utilized smartphone-mediated coping strategies. Through descriptive statistics such as frequency, percentage, mean,

and standard deviation, the researchers were able to present a clear picture of the respondents and the variables being studied.

The study also employed a comparative research design to determine whether significant differences existed in occupational stress and smartphone-mediated coping strategies when respondents were grouped according to their demographic characteristics. This design was appropriate because employees may differ in their experiences of workplace stress and coping behaviors based on factors such as age, gender, civil status, work industry, and employee classification level. Through comparative analysis, the researchers identified whether these differences were statistically significant.

Furthermore, a correlational research design was utilized to examine the relationship between occupational stress and smartphone-mediated coping strategies among employees. Correlational research seeks to determine the degree and direction of association between two or more variables without manipulating them. In this study, the researchers determined whether employees who reported varying levels of occupational stress also differed in their use of smartphone-mediated coping strategies. It is important to note that correlational research does not establish cause-and-effect relationships but rather identifies the extent to which variables are associated with one another.

### **Sources of Data**

The primary source of data for this study will be the responses obtained from employees across different work industries through a structured survey questionnaire. The questionnaire will serve as the main instrument for gathering information relevant to the study's objectives.

The survey instrument will consist of three major sections. The first section will collect information regarding the demographic profile of the respondents, including age, gender, civil status, work industry, and employee classification level. The second section will measure the respondents' level of occupational stress across the identified domains, namely workmate stressors, incumbent stressors, work duties and task stressors, and client stressors. The third section will assess the extent of smartphone-mediated coping strategies utilized by the respondents in terms of entertainment, social connection and emotional support, relaxation and mindfulness applications, and listening to music or sounds.

### **Participants of the Study**

The participants of this study consisted of 136 Filipino corporate employees currently employed in various organizations across the Province of Laguna. Respondents represented diverse work industries, including education, business and corporate offices, banking and finance, manufacturing, government services, healthcare, information technology, retail, hospitality, and

other service-oriented sectors. Including employees from different industries enabled the researchers to obtain a more comprehensive understanding of occupational stress and smartphone-mediated coping strategies across varying organizational environments and job demands.

Laguna was selected as the locale of the study because it is one of the country's major economic and industrial centers, hosting a wide range of local and multinational companies operating in manufacturing, technology, business services, education, healthcare, retail, and government sectors. The province has a highly diverse workforce with employees occupying different organizational positions and performing various job functions. This diversity provides an appropriate setting for examining occupational stress and smartphone-mediated coping strategies, as employees are exposed to different workplace demands, organizational cultures, and technological environments. Furthermore, Laguna has experienced continuous economic growth and digital transformation, making smartphones an integral part of employees' daily work and personal lives. These characteristics make the province an ideal setting for investigating how modern employees cope with occupational stress through smartphone use.

To ensure that respondents possessed sufficient experience relevant to the variables under investigation, specific inclusion criteria were established. Participants were required to (1) be at least eighteen (18) years of age; (2) be currently employed in a formal organization located in Laguna; (3) have rendered at least six (6) months of continuous service in their current organization; (4) own and regularly use a smartphone for both work-related and personal purposes; and (5) voluntarily agree to participate in the study. The six-month employment requirement ensured that participants had adequate exposure to their workplace environment, organizational culture, and job responsibilities, enabling them to provide informed responses regarding occupational stress and coping practices.

The study excluded unemployed individuals, retirees, self-employed individuals without organizational affiliation, interns, trainees, and probationary employees with less than six (6) months of employment. Employees who did not own or regularly use smartphones were likewise excluded because smartphone-mediated coping strategies constituted one of the primary variables of the study. Incomplete questionnaires were also omitted from the final analysis to ensure the accuracy, completeness, and reliability of the data. |

## **Sampling Technique**

This study utilized purposive sampling, a non-probability sampling technique in which respondents were deliberately selected based on specific inclusion criteria established by the researchers. Purposive sampling was deemed appropriate because the study required participants who were currently employed and had experience using smartphones as part of their daily lives, making them capable of providing relevant information regarding occupational stress and smartphone-mediated coping strategies.

## **Data Gathering Procedure**

Prior to the conduct of the study, the researchers prepared and finalized the survey questionnaire based on the variables and objectives of the research. The questionnaire underwent validation to ensure that the items were clear, relevant, and appropriate for measuring occupational stress and smartphone-mediated coping strategies among employees.

After securing the necessary approval from the research adviser and other concerned authorities, the researchers identified potential respondents who met the established inclusion criteria. The respondents consisted of employees from various work industries in Laguna who were at least eighteen (18) years old, currently employed, and regular users of smartphones.

The survey questionnaire was administered through an online platform to facilitate efficient data collection and increase accessibility among respondents. Before answering the questionnaire, participants were provided with an informed consent form explaining the purpose of the study, the voluntary nature of participation, the confidentiality of their responses, and their right to withdraw from the study at any time without penalty.

## **Research Instruments**

The primary instrument utilized in this study was a structured survey questionnaire designed to gather data regarding the occupational stress and smartphone-mediated coping strategies of employees across different work industries. The questionnaire was chosen as the primary data-gathering tool because it allows for the efficient collection of standardized information from a large number of respondents and facilitates quantitative analysis of the variables under investigation.

The validated and reliable questionnaire served as the primary source of data for examining the occupational stress and smartphone-mediated coping strategies of employees and for determining the differences and relationships among the variables included in the study.

## **Statistical Treatment**

The data gathered in this study were analyzed using appropriate descriptive and inferential statistical procedures to answer the research questions and test the hypotheses. All statistical analyses were performed using statistical software, with the level of significance set at  $\alpha = .05$ .

To describe the demographic profile of the respondents in terms of age, gender, civil status, work industry, and employee classification level, frequency counts and percentages were computed. These descriptive statistics summarized the distribution of respondents according to their demographic characteristics.

To determine the level of occupational stress and the extent of smartphone-mediated coping strategies, the weighted mean and standard deviation were utilized. The weighted mean was used to determine the average responses of the respondents for each indicator and dimension, while the standard deviation measured the variability of the responses around the mean, thereby providing information regarding the consistency of the participants' responses.

Prior to conducting inferential statistical analyses, the assumptions underlying parametric statistical tests were examined to ensure the appropriateness of the selected analyses.

The assumption of normality was assessed using the Shapiro–Wilk Test, which is recommended for evaluating the normality of data distributions, particularly for small to moderate sample sizes. A non-significant result ( $p > .05$ ) indicated that the distribution of the data did not significantly deviate from normality and that the assumption was satisfied.

The assumption of homogeneity of variance was evaluated using Levene's Test for Equality of Variances. This procedure determined whether the variances of the comparison groups were statistically equal. A non-significant Levene's Test ( $p > .05$ ) indicated that the assumption of equal variances was met, thereby supporting the use of parametric procedures such as the Independent Samples t-test and the One-Way Analysis of Variance (ANOVA).

Before performing the correlational analysis, scatterplots were examined to assess the assumptions of linearity and homoscedasticity. Pearson Product-Moment Correlation requires that the relationship between variables be linear and that the variance of residuals remains relatively constant across the range of values. Visual inspection of the scatterplots was conducted to verify these assumptions prior to computing the correlation coefficient.

To determine whether significant differences existed in occupational stress when respondents were grouped according to their demographic characteristics, an Independent Samples t-test was employed for demographic variables consisting of two groups, such as gender. For demographic variables with three or more categories, including age, civil status, work industry, and employee classification level, a One-Way Analysis of Variance (ANOVA) was performed.

Similarly, to determine whether significant differences existed in smartphone-mediated coping strategies across demographic characteristics, the Independent Samples t-test was utilized for variables with two comparison groups, while the One-Way Analysis of Variance (ANOVA) was employed for variables containing three or more categories.

To determine the relationship between occupational stress and smartphone-mediated coping strategies, the Pearson Product-Moment Correlation Coefficient (Pearson's  $r$ ) was computed. Pearson's correlation was considered appropriate because both variables were measured on continuous scales and satisfied the assumptions of normality and linearity. The correlation coefficient measured both the strength and direction of the linear relationship between occupational stress and smartphone-mediated coping strategies.

In addition to statistical significance testing, effect size estimates were computed to determine the practical significance of the findings. For the Independent Samples t-test, Cohen's  $d$  was calculated to determine the magnitude of the difference between two group means.

Cohen's (1988) criteria were used for interpretation, wherein values of 0.20, 0.50, and 0.80 represent small, medium, and large effect sizes, respectively.

For the One-Way Analysis of Variance (ANOVA), Eta Squared ( $\eta^2$ ) was computed to determine the proportion of variance in the dependent variable explained by the independent variable. The effect size was interpreted using Cohen's (1988) guidelines, where  $\eta^2 = .01$  indicates a small effect,  $\eta^2 = .06$  indicates a medium effect, and  $\eta^2 = .14$  indicates a large effect.

Where appropriate, Partial Eta Squared ( $\eta p^2$ ) was likewise reported to estimate the proportion of explained variance attributable to the independent variable after accounting for unexplained variance. The same interpretative guidelines were adopted, with values of .01, .06, and .14 representing small, medium, and large effect sizes, respectively.

For the correlational analysis, the coefficient of determination ( $r^2$ ) was likewise reported to indicate the proportion of variance shared between occupational stress and smartphone-mediated coping strategies, thereby providing an estimate of the practical importance of the observed relationship.

The combined reporting of assumption testing, statistical significance, and effect size estimates provides a more comprehensive interpretation of the findings by addressing not only whether statistically significant differences or relationships exist but also the magnitude and practical significance of the observed effects. This approach is consistent with current recommendations for quantitative research reporting in psychology, education, and the behavioral sciences.

## **RESULTS AND DISCUSSION**

This chapter presents the analysis, interpretation, and discussion of the data gathered in relation to the objectives of the study, particularly focusing on the relationship between occupational stress and smartphone-mediated coping strategies of employees from various work industries.

The findings are organized according to the sequence of the research questions and include the demographic profile of the respondents, the level of occupational stress across identified domains, the extent to which smartphones function as coping mediators, as well as the significant differences and relationships among the variables investigated. Descriptive and inferential statistical tools were utilized to provide a comprehensive examination of the data, while the interpretation of results was anchored on relevant psychological theories, related literature, and empirical studies concerning occupational stress, digital coping behaviors, and stress recovery.

**Table 1**

*Demographic Profile of the Respondents*

| Characteristics | Category                        | Frequency ( <i>n</i> ) | Percentage |
|-----------------|---------------------------------|------------------------|------------|
| Age Group       | 8–30 years                      | 75                     | 55.15      |
|                 | 31–40 years                     | 40                     | 29.41      |
|                 | 41–50 years                     | 15                     | 11.03      |
|                 | 51 years and above              | 6                      | 4.41       |
| Gender          | Male                            | 54                     | 39.71      |
|                 | Female                          | 82                     | 60.29      |
| Civil Status    | Single                          | 86                     | 63.24      |
|                 | Married                         | 48                     | 35.29      |
|                 | Separated                       | 2                      | 1.47%      |
| Work Industry   | Education                       | 26                     | 19.12%     |
|                 | Finance/ Banking/<br>Insurance  | 5                      | 3.68%      |
|                 | Government                      | 4                      | 2.94%      |
|                 | Business/ Corporate/<br>Office  | 18                     | 13.24%     |
|                 | Service/ Agency/<br>Contractual | 55                     | 40.44%     |

|                                   |                                           |    |        |
|-----------------------------------|-------------------------------------------|----|--------|
|                                   | Manufacturing/<br>Industrial/ Technical   | 9  | 6.62%  |
|                                   | BPO/ IT/ Media                            | 9  | 6.62%  |
|                                   | Transportation/<br>Shipping               | 2  | 1.47%  |
|                                   | Health/ Legal/<br>Security                | 3  | 2.21%  |
| Employee<br>Classification Levels | Management/<br>Supervisory                | 15 | 11.03% |
|                                   | Administrative/<br>Human Resource         | 41 | 30.15% |
|                                   | Associate/ Consultant/<br>Teller/ Cashier | 14 | 10.29% |
|                                   | Technical/ Operations                     | 23 | 16.91% |
|                                   | Education/ Healthcare/<br>Public Service  | 24 | 17.65% |
|                                   | Sales/ Customer<br>Service/ Creatives     | 15 | 11.03% |
|                                   | Skilled/ Support Staff                    | 3  | 2.21%  |
|                                   | Others                                    | 1  | 0.74%  |

**Note.** Frequencies (*f*) and percentages (%) are presented to describe the demographic characteristics of the respondents. Percentages may not total 100% due to rounding.( *N*= 136)

**Table 1** presents the demographic characteristics of the 136 employees who participated in the study. The respondents were predominantly young adults aged 18–30 years (55.15%),

followed by those aged 31–40 years (29.41%). Female employees comprised the majority of the sample (60.29%), while male respondents accounted for 39.71%. Most participants were single (63.24%), with married employees representing 33.09% of the sample and only a small proportion identifying as separated or widowed. In terms of industry affiliation, the largest group of respondents was employed in the service, agency, and contractual sector (40.44%), followed by the education sector (19.12%) and business or corporate offices (13.24%). Regarding employee classification, administrative and human resource personnel constituted the largest occupational group (30.15%), followed by employees in education, healthcare, and public service (17.65%) and those assigned to technical and operational functions (16.91%). Overall, the demographic profile indicates that the study primarily represents a young, female, and single workforce employed predominantly in service-oriented industries and administrative roles.

The demographic profile revealed that the respondents were predominantly young adults aged 18–30 years, female, and employed in the service sector. These characteristics provide an important context for understanding occupational stress and smartphone-mediated coping strategies because they represent a workforce that is highly engaged with digital technologies and routinely exposed to dynamic workplace demands.

The predominance of employees aged 18–30 years reflects the increasing participation of younger adults in the contemporary workforce. As digital natives, younger employees are generally more accustomed to integrating smartphones into their daily activities, including work communication, information seeking, and stress management. Kushlev and Leitaó (2020) explained that smartphones have become embedded in everyday life by providing immediate access to social support, entertainment, and information, making them valuable psychological resources when individuals encounter stressful situations. Similarly, Wolfers and Schneider (2021) reported that digital media are increasingly used as coping tools because they facilitate emotional regulation, social connectedness, and temporary psychological detachment from stress. These findings suggest that the predominance of younger respondents provides an appropriate context for examining smartphone-mediated coping, as this age group is more likely to incorporate mobile technologies into their coping behaviors than older generations.

The finding that female employees constituted the majority of the respondents is likewise consistent with workforce patterns observed in service-oriented and administrative occupations. Although gender itself does not determine occupational stress, previous research indicates that women often occupy positions requiring continuous interpersonal interaction, emotional labor, and customer engagement, all of which may increase exposure to workplace stressors. Kim (2022) found that women employed in the service sector experienced occupational stress associated with work roles and that adaptive coping strategies, resilience, and social support were positively associated with psychological well-being. Likewise, the World Health Organization and International Labour Organization (2022) emphasized that employee well-being is influenced primarily by psychosocial working conditions, organizational support, and job demands rather than by gender alone. Consequently, the greater representation of female respondents should be interpreted as reflecting the composition of the sampled workforce rather than indicating that women inherently experience higher occupational stress.

Another notable finding was that employees from the service sector comprised the largest proportion of the respondents. This demographic pattern is particularly relevant because service-oriented occupations frequently involve customer interaction, emotional labor, multitasking, and continuous communication, which have been recognized as common occupational stressors. Goel and Verma (2021) demonstrated that employees in the service industry experience workplace stress differently across age groups and rely on various coping mechanisms to manage occupational demands. Their findings further indicated that coping strategies vary according to employees' work experiences and organizational contexts rather than demographic characteristics alone. These observations support the relevance of examining smartphone-mediated coping among service-sector employees, whose work environments increasingly depend on digital communication technologies.

Taken together, the demographic characteristics indicate that the respondents represent a young, digitally connected, and service-oriented workforce, making them an appropriate population for investigating occupational stress and smartphone-mediated coping strategies.

**Table 2**

*Level of Occupational Stress of the Respondents in terms of Workmate Stressors*

| Indicator                                                                             | Mean        | Standard Deviation | Verbal Interpretation |
|---------------------------------------------------------------------------------------|-------------|--------------------|-----------------------|
| Do you feel supported by your teammates?                                              | 4.50        | 0.72               | Very Low Level        |
| Do you feel you can trust your colleagues?                                            | 4.32        | 0.77               | Very Low Level        |
| Do you feel safe asking for assistance or speaking up when processes are ineffective? | 4.29        | 0.78               | Very Low Level        |
| Do you feel the team works well together?                                             | 4.53        | 0.67               | Very Low Level        |
| Do your daily workplace interactions foster a supportive and comfortable environment? | 4.15        | 0.86               | Low Level             |
| <b>Overall Mean:</b>                                                                  | <b>4.36</b> |                    | <b>Very Low Level</b> |

**Note.** *M* = Mean; *SD* = Standard Deviation. Occupational stress was interpreted using the following scale: 4.21–5.00 = Very High, 3.41–4.20 = High, 2.61–3.40 = Moderate, 1.81–2.60 = Low, and 1.00–1.80 = Very Low.

The findings indicate that respondents experienced a very low level of occupational stress related to workmate stressors ( $M = 4.36$ ). Among the indicators, teamwork ( $M = 4.53$ ) and

support from teammates ( $M = 4.50$ ) received the highest ratings, suggesting that respondents generally perceived their colleagues as cooperative, trustworthy, and supportive. These findings imply that interpersonal relationships in the workplace function as protective resources that minimize work-related stress rather than contribute to it. The present findings are consistent with the study of Bakker and de Vries (2021), who emphasized that supportive relationships among coworkers function as valuable job resources that enhance work engagement while reducing burnout and occupational stress. Similarly, Mazzetti et al. (2023) found that workplace social support significantly predicts employee well-being by strengthening resilience and reducing emotional exhaustion among employees exposed to demanding work conditions. Likewise, Kundi et al. (2021) reported that coworker support positively influences psychological well-being through increased psychological capital, suggesting that employees who receive encouragement and assistance from colleagues are better equipped to cope with workplace pressures.

Recent studies also highlight the importance of psychological safety in reducing occupational stress. Edmondson and Mortensen (2021) argued that employees who work in psychologically safe environments are more likely to seek assistance, communicate concerns openly, and collaborate effectively with coworkers, thereby reducing interpersonal conflict and work-related anxiety. Similarly, WHO and ILO (2022) emphasized that supportive organizational relationships are among the primary protective factors against psychosocial risks in the workplace and contribute to healthier and more productive work environments.

Although the respondents generally reported very low occupational stress arising from coworker relationships, the comparatively lower rating for supportive daily workplace interactions suggests that opportunities remain for organizations to strengthen everyday interpersonal communication. One possible explanation is the increasing adoption of hybrid work arrangements and technology-mediated communication, which, although effective for task coordination, may reduce spontaneous social interactions that foster stronger interpersonal connections. As noted by Wang et al. (2024), hybrid work environments may maintain productivity while limiting informal social exchanges that contribute to employees' sense of belonging and emotional support.

The findings have important implications for organizational practice. Organizations should continue fostering collaborative work environments through team-building activities, peer mentoring programs, and leadership practices that encourage open communication and mutual support.

**Table 2.1**

*Incumbent Stressors*

| Indicator                                                                                                       | Mean        | Standard Deviation | Verbal Interpretation |
|-----------------------------------------------------------------------------------------------------------------|-------------|--------------------|-----------------------|
| Do you feel empowered by the level of independence your supervisor gives you?                                   | 3.82        | 1.26               | Low Level             |
| Do you feel your hard work is noticed and appreciated by the superior?                                          | 4.01        | 0.97               | Low Level             |
| Do you regularly receive clear and consistent guidance from your leader?                                        | 3.73        | 1.11               | Low Level             |
| Do you feel your administrative workload and paperwork have been manageable over the last 6 months?             | 4.13        | 0.97               | Low Level             |
| Does your leader effectively communicate organizational changes and expectations during periods of high stress? | 3.99        | 0.93               | Low Level             |
| <b>Overall Mean:</b>                                                                                            | <b>3.94</b> |                    | <b>Low Level</b>      |

**Note.** *M = Mean; SD = Standard Deviation. Higher mean scores indicate greater perceived occupational stress. Interpretation follows the study's five-point Likert scale.*

The findings revealed that respondents experienced a low level of occupational stress associated with incumbent stressors ( $M = 3.94$ ). The highest-rated indicator pertained to respondents' perception that their administrative workload and paperwork were manageable ( $M = 4.13$ ), whereas the lowest-rated indicator involved receiving clear and consistent guidance from supervisors ( $M = 3.73$ ). Although all indicators remained within the low-stress category, the results suggest that supervisory support generally functions as a protective factor against occupational stress while indicating opportunities to strengthen leadership communication within organizations. The present findings are supported by Inceoglu et al. (2021), who reported that supportive leadership and high-quality supervisor–employee relationships significantly reduce employee burnout and psychological strain by increasing employees' perceptions of organizational support and job control. Similarly, Bakker and de Vries (2021) emphasized that leadership behaviors promoting autonomy, recognition, and constructive feedback strengthen employees' personal resources, thereby reducing emotional exhaustion and improving work engagement.

Likewise, Montano et al. (2022) found that transformational and supportive leadership styles are associated with lower occupational stress because employees experience greater trust, role clarity, and confidence in completing work responsibilities. Leaders who communicate expectations clearly and recognize employee contributions create psychologically safe environments where employees are more willing to seek assistance and collaborate with others.

Furthermore, the World Health Organization and International Labour Organization (2022) emphasized that supportive leadership, fair management practices, employee recognition, and effective communication are among the most important organizational interventions for reducing psychosocial risks at work. Organizations that invest in leadership development programs and communication training are more likely to foster psychologically healthy work environments characterized by lower occupational stress and greater employee engagement.

**Table 2.2**

*Work Duties and Tasks Stressors*

| Indicator                                                                                          | Mean        | Standard Deviation | Verbal Interpretation |
|----------------------------------------------------------------------------------------------------|-------------|--------------------|-----------------------|
| Do you feel pressured by unrealistic or overlapping deadlines?                                     | 3.61        | 1.10               | Low Level             |
| When you start a task, do you have a clear understanding of what a “successful” result looks like? | 4.40        | 0.73               | Very Low Level        |
| Does the repetitive nature of your work lead to mental fatigue?                                    | 3.40        | 1.21               | Moderate Level        |
| Do you feel there is a clear path for growth in your current role?                                 | 4.14        | 0.96               | Low Level             |
| Do you feel overloaded with more tasks than you can realistically manage in a day?                 | 3.55        | 1.05               | Low Level             |
| <b>Overall Mean:</b>                                                                               | <b>3.82</b> |                    | <b>Low Level</b>      |

**Note.** *M* = Mean; *SD* = Standard Deviation. Interpretation of weighted mean follows the scale: 4.21–5.00 = Very High, 3.41–4.20 = High, 2.61–3.40 = Moderate, 1.81–2.60 = Low, and 1.00–1.80 = Very Low.

The findings revealed that respondents experienced a low level of occupational stress associated with work duties and task stressors ( $M = 3.82$ ). Respondents reported the lowest stress regarding understanding what constitutes successful work performance, while repetitive work tasks generated comparatively greater stress. These findings suggest that although employees generally perceive their workloads as manageable, aspects related to task monotony and repetitive job functions remain potential sources of occupational strain.

The relatively lower rating associated with repetitive work tasks is likewise supported by recent literature indicating that monotonous work can contribute to mental fatigue even when overall workload remains manageable. Montano et al. (2022) reported that repetitive job activities reduce cognitive stimulation and increase emotional exhaustion, particularly when employees have limited opportunities for task variation or professional development. Similarly, WHO and ILO (2022) identified excessive workload, repetitive tasks, and insufficient job control as important psychosocial hazards that may negatively affect employees' mental health if not effectively managed.

Furthermore, Nielsen et al. (2023) explained that prolonged exposure to repetitive work may gradually diminish employees' intrinsic motivation because repetitive tasks often provide fewer opportunities for learning, creativity, and skill utilization. Employees who repeatedly perform similar activities may experience reduced work engagement despite having manageable workloads, particularly in occupations characterized by standardized operational procedures.

**Table 2.3**

*Client Stressor*

| Indicator                                                                                                             | Mean        | Standard Deviation | Verbal Interpretation |
|-----------------------------------------------------------------------------------------------------------------------|-------------|--------------------|-----------------------|
| Do you feel adequately trained in active listening and conflict resolution to manage challenging client interactions? | 3.96        | 0.93               | Low Level             |
| Do you have sufficient time between clients to pause and reset before your next interactions?                         | 4.05        | 0.91               | Low Level             |
| Does clear communication with your clients successfully minimize project rework?                                      | 3.38        | 1.52               | Low Level             |
| Do your clients generally interact with you in a professional and respectful manner?                                  | 3.80        | 1.15               | Low Level             |
| Do you experience emotional exhaustion after handling difficult client interactions?                                  | 3.43        | 1.54               | Low Level             |
| <b>Overall Mean:</b>                                                                                                  | <b>3.72</b> |                    | <b>Low Level</b>      |

**Note.** *M = Mean; SD = Standard Deviation. Higher mean values represent higher perceived stress associated with client-related responsibilities*

The findings revealed that respondents experienced a low level of occupational stress associated with client stressors ( $M = 3.72$ ). The results indicate that employees generally perceived client interactions as manageable, suggesting that they possess sufficient personal and organizational resources to effectively address the interpersonal demands associated with customer- or client-facing roles. Although stress remained low overall, communication-related concerns and emotionally demanding client interactions emerged as relatively greater sources of strain, highlighting areas that warrant continued organizational attention. To support the result, Grandey and Melloy (2020) explained that employees who must continuously regulate their emotions while maintaining professional behavior during difficult interactions are more susceptible to emotional fatigue over time. However, the relatively low level of occupational stress observed in the present study suggests that respondents may have developed effective coping strategies or benefited from supportive organizational environments that mitigate the adverse effects of emotional labor.

**Table 3**

*The Extent to which Smartphones Serve as a Mediator for the Respondents' Coping Strategies in Terms of Entertainment*

| Indicator                                                                                                  | Mean        | Standard Deviation | Verbal Interpretation |
|------------------------------------------------------------------------------------------------------------|-------------|--------------------|-----------------------|
| Do you use your cellphone to watch social media videos as a coping strategy when feeling stressed at work? | 4.27        | 0.83               | Very Great Extent     |
| When stressed, do you intentionally seek out media content that promotes laughter or relaxation?           | 4.04        | 1.00               | Great Extent          |
| Do you use social media as a primary source of comfort when feeling overwhelmed or stressed?               | 4.18        | 0.94               | Great Extent          |
| Do you use your phone for entertainment videos as a way to recharge and manage stress?                     | 3.79        | 1.21               | Great Extent          |
| Does following certain influencers or celebrities make you feel better about your life?                    | 4.18        | 1.00               | Great Extent          |
| <b>Overall Mean:</b>                                                                                       | <b>4.09</b> |                    | <b>Great Extent</b>   |

**Note:** *M = Mean; SD = Standard Deviation. Smartphone-mediated coping strategies were interpreted using the following scale: 4.21–5.00 = Very High, 3.41–4.20 = High, 2.61–3.40 = Moderate, 1.81–2.60 = Low, and 1.00–1.80 = Very Low.*

The findings revealed that respondents used smartphones for entertainment to a great extent as a coping strategy for occupational stress ( $M = 4.09$ ). This suggests that entertainment-based smartphone activities, particularly watching short-form videos and engaging with enjoyable digital content, have become common coping mechanisms that employees use to regulate stress, restore positive emotions, and temporarily detach from workplace demands. The results indicate that smartphones function not merely as communication devices but also as accessible psychological resources that facilitate emotional recovery during or after stressful work experiences. The findings are explained using the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), which proposes that individuals continuously evaluate stressful situations and select coping strategies based on available resources. Entertainment through smartphones represents an emotion-focused coping strategy, wherein employees attempt to regulate emotional responses rather than directly eliminate workplace stressors. Brief exposure to enjoyable digital content may reduce negative emotions, improve mood, and provide temporary psychological relief before employees resume work responsibilities.

Overall, the findings indicate that smartphones serve as an important emotion-focused coping resource through entertainment activities. While digital entertainment appears to facilitate temporary stress relief and emotional recovery, organizations should also encourage balanced and mindful smartphone use to maximize its psychological benefits while minimizing the potential risks associated with excessive digital engagement. The present findings are consistent with Bennett et al. (2022), whose meta-analysis demonstrated that psychological recovery during work breaks significantly improves employee well-being, reduces emotional exhaustion, and restores cognitive functioning. Similarly, de Bloom et al. (2021) reported that engaging in enjoyable leisure activities during breaks facilitates recovery from work demands by promoting emotional detachment and reducing accumulated stress. These findings suggest that entertainment-based smartphone use may provide employees with brief recovery experiences that help sustain work engagement throughout the workday.

**Table 3.1**

*Social Connection and Emotional Support*

| Indicator                                                                                                             | Mean | Standard Deviation | Verbal Interpretation |
|-----------------------------------------------------------------------------------------------------------------------|------|--------------------|-----------------------|
| Do you contact your family or friends for emotional support when feeling stressed at work?                            | 4.17 | 0.99               | Great Extent          |
| Do you seek out someone to call when you are feeling stressed by work?                                                | 4.15 | 0.92               | Great Extent          |
| When you are feeling overwhelmed, do you use your smartphone to reach out for active support (e.g., a voice call or a | 4.13 | 1.03               | Great Extent          |

|                                                                                                                                                       |             |      |                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------|---------------------|
| vulnerable text to a close friend) that leaves you feeling heard?                                                                                     |             |      |                     |
| Do you feel comfortable admitting to your peers that you are struggling with stress?                                                                  | 3.99        | 1.07 | Great Extent        |
| When you are highly stressed, do you find that a video call (seeing a face) is significantly more effective at calming you down than a standard text? | 3.93        | 1.14 | Great Extent        |
| <b>Overall Mean:</b>                                                                                                                                  | <b>4.07</b> |      | <b>Great Extent</b> |

**Note.** *M = Mean; SD = Standard Deviation. Higher scores indicate more frequent use of smartphone-mediated emotional regulation strategies.*

The findings revealed that respondents utilized smartphones for social connection and emotional support to a great extent ( $M=4.07$ ), indicating that digital communication has become an important coping resource for managing occupational stress. The results suggest that respondents frequently rely on smartphone applications to maintain interpersonal relationships, seek emotional reassurance, and communicate with family, friends, and colleagues during stressful situations. This finding highlights the growing role of mobile technology in facilitating psychological well-being by strengthening social connectedness despite workplace demands. The present findings are consistent with Marinucci et al. (2022), who found that digital communication technologies strengthen perceived social support and reduce psychological distress by maintaining interpersonal connectedness during periods of stress. Their study demonstrated that individuals who actively communicate through mobile messaging platforms report higher emotional well-being because online interactions help satisfy the fundamental need for belongingness and social support. Similarly, Hall et al. (2021) reported that frequent smartphone-mediated communication with family and friends enhances perceived emotional support and contributes to greater life satisfaction and lower perceived stress, particularly among working adults. The findings are likewise supported by Liu et al. (2023), who observed that employees increasingly use smartphones to maintain supportive relationships during stressful work experiences. Their research suggests that instant messaging, voice calls, and social networking platforms provide rapid access to emotional reassurance and practical advice, enabling individuals to recover more effectively from occupational strain.

**Table 3.2**

*Relaxation and Mindfulness Application*

| Indicator                                                                                                                                              | Mean        | Standard Deviation | Verbal Interpretation |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------|-----------------------|
| Do you use your cellphone to download mobile apps to help cope with your stress at work??                                                              | 3.79        | 1.20               | Great Extent          |
| Do you use a "notes" or "gratitude" app on your phone to quickly write down one positive thing when you feel stress starting to peak?                  | 3.92        | 1.19               | Great Extent          |
| When feeling stressed at work, do you play video games on your phone to relax?                                                                         | 3.99        | 1.17               | Great Extent          |
| When you feel a "thought spiral," do you use a grounding app or a photo album of "happy memories" on your phone to bring yourself back to the present? | 3.99        | 1.14               | Great Extent          |
| When you can't get outside, do you watch high-quality nature videos (e.g., forest, ocean waves) on your phone to lower your stress?                    | 3.88        | 1.22               | Great Extent          |
| <b>Overall Mean:</b>                                                                                                                                   | <b>3.91</b> |                    | <b>Great Extent</b>   |

**Note.** *M = Mean; SD = Standard Deviation. Higher mean scores indicate greater reliance on smartphones for maintaining social support and interpersonal communication.*

The findings revealed that respondents utilized relaxation and mindfulness applications to a great extent as part of their smartphone-mediated coping strategies. This finding suggests that employees increasingly integrate digital wellness technologies into their daily routines to regulate emotional distress, reduce occupational stress, and promote psychological well-being. The results indicate that smartphones have evolved beyond communication tools, serving as accessible platforms for stress management through guided relaxation, meditation, breathing exercises, and mindfulness-based interventions. The present findings are supported by Huberty et al. (2021), who demonstrated that mindfulness applications significantly reduced perceived stress and improved emotional well-being among adults who regularly practiced guided meditation. Their findings suggest that mobile mindfulness interventions provide convenient and effective opportunities for psychological recovery, particularly among individuals with limited access to traditional mental health services. Similarly, Flett et al. (2022) reported that app-based mindfulness programs produced meaningful reductions in stress, anxiety, and emotional

exhaustion while enhancing mindfulness skills and psychological resilience among working populations.

**Table 3.3**

*Listening to Music or Sounds*

| Indicator                                                                                                             | Mean        | Standard Deviation | Verbal Interpretation |
|-----------------------------------------------------------------------------------------------------------------------|-------------|--------------------|-----------------------|
| Do you seek out sad music or tragic films when you are down to help you "cry it out" or feel understood?              | 3.98        | 1.17               | Great Extent          |
| When feeling stressed by your physical surroundings (like a noisy office) do you use headphones to block the noise?   | 4.16        | 1.10               | Great Extent          |
| Do you select music that reflects your current emotional state when feeling stressed?                                 | 4.16        | 0.96               | Great Extent          |
| Do you prefer selecting your own ambient sounds or music on your phone to help you focus?                             | 3.93        | 1.13               | Great Extent          |
| When you open your phone while stressed, do you have a "pause ritual" (taking one deep breath) before tapping an app? | 4.24        | 0.98               | Very Great Extent     |
| <b>Overall Mean:</b>                                                                                                  | <b>4.09</b> |                    | <b>Great Extent</b>   |

**Note.** *M = Mean; SD = Standard Deviation. Higher scores reflect greater use of smartphones for entertainment and relaxation as coping strategies.*

The findings revealed that respondents utilized smartphones for listening to music or sounds to a great extent as a coping strategy for occupational stress ( $M = 4.09$ ). The results suggest that music-based smartphone activities constitute an important emotional regulation strategy, enabling employees to manage stress, reduce environmental distractions, and facilitate psychological recovery during demanding work situations. Notably, respondents reported a very high tendency to engage in a brief pause or breathing ritual before opening smartphone applications when feeling stressed, indicating that many employees intentionally combine mindfulness practices with smartphone use to regulate their emotional responses. The present findings are supported by de Witte et al. (2022), who reported that music listening is associated with improved emotional regulation and reduced perceived stress because it promotes relaxation and facilitates recovery from cognitively demanding activities. Likewise, Krause et al. (2021)

found that individuals frequently use personally selected music to regulate emotions, improve concentration, and alleviate anxiety during stressful situations. Their findings suggest that music serves as a flexible coping resource because individuals intentionally select songs that match or modify their emotional states, thereby supporting adaptive emotion regulation. The frequent use of headphones to block distracting workplace noise further highlights the importance of environmental regulation as part of stress management. Employees working in noisy or overstimulating environments may use music not only for entertainment but also to improve concentration and reduce cognitive overload. Consistent with this interpretation, Lesiuk (2021) reported that background music and preferred sound environments enhance concentration, reduce workplace tension, and improve task performance among employees performing cognitively demanding work.

**Table 4**

*Difference in the Occupational Stress of the Respondents when grouped according to their demographic profile in terms of gender*

|                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>H<sub>1</sub>: There is no significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of civil status.</i> |
| <i>Ha<sub>1</sub>: There is a significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of civil status.</i> |
| <i>Alpha: 0.05</i>                                                                                                                                                                   |

| <b>Demographic Variable</b> | <b>Group</b> | <b>Mean</b> | <b>t-value</b> | <b>p-value</b> | <b>Decision</b>                 | <b>Interpretation</b> |
|-----------------------------|--------------|-------------|----------------|----------------|---------------------------------|-----------------------|
| <b>Gender</b>               | Male         | 3.9259      |                |                |                                 |                       |
|                             | Female       | 3.9817      | -0.4377        | 0.6641         | Failed to Reject H <sub>1</sub> | Not Significant       |

**Note.** An independent-samples *t* test was conducted using an alpha level of .05. A *p* value less than .05 indicates a statistically significant difference between groups.

The independent samples *t*-test revealed no statistically significant difference in occupational stress between male and female respondents,  $t = -0.4377$ ,  $p = .664$ . Because the obtained *p*-value exceeded the established significance level of .05, the null hypothesis was retained, indicating that occupational stress was experienced at comparable levels regardless of gender. These findings suggest that gender alone does not substantially influence employees'

perceptions of occupational stress within the organizations represented in the present study. the findings suggest that organizational and work-related factors exert a more substantial influence on employees' stress experiences, highlighting the importance of organizational strategies that benefit all employees regardless of gender. The present findings supported by Yildirim et al. (2023) found that gender was not a significant predictor of occupational stress after controlling for workload, job control, organizational support, and work environment characteristics. cupational stress among respondents.

**Table 4.1**

*Difference in Occupational Stress Among Respondents Based on Age*

|                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>H<sub>1</sub>: There is no significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of age.</i> |
| <i>H<sub>a1</sub>: There is a significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of age.</i> |
| <i>Alpha: 0.05</i>                                                                                                                                                          |

| Source of Variation | SS      | df | MS     | F-value | p-value  | Decision              | Interpretation |
|---------------------|---------|----|--------|---------|----------|-----------------------|----------------|
| Between Groups      | 3.9659  | 3  | 1.3220 | 8.8945  | < 0.0001 | Reject H <sub>1</sub> | Significant    |
| Within Groups       | 11.2957 | 76 | 0.1486 |         |          |                       |                |
| Total               | 15.2616 | 79 |        |         |          |                       |                |

**Note.** A one-way analysis of variance (ANOVA) was performed using an alpha level of .05. Significant results indicate differences among age groups. Where applicable, post hoc analysis is recommended to identify specific group differences.

The one-way analysis of variance (ANOVA) revealed a statistically significant difference in occupational stress across age groups,  $F = 8.8945$ ,  $p < .001$ . Consequently, the null hypothesis was rejected, indicating that employees from different age groups experience occupational stress differently. These findings suggest that age is an important factor influencing how employees perceive, interpret, and respond to workplace demands. Differences in occupational stress may

reflect variations in career stage, work experience, personal responsibilities, and coping resources that evolve throughout the lifespan. The findings are further supported by the Life-Span Theory of Control (Heckhausen et al., 2020), which proposes that individuals develop increasingly adaptive coping strategies as they progress through different stages of adulthood. With increasing age and professional experience, employees become more proficient in regulating emotions, prioritizing work demands, and utilizing available resources to maintain psychological well-being. Consequently, occupational stress may vary across age groups because employees differ in their cognitive appraisal of workplace challenges and in the coping strategies they employ.

**Table 4.2**

*Difference in Occupational Stress Among Respondents Based on Civil Status*

| Source of Variation | SS      | df | MS     | F-value | p-value  | Decision              | Interpretation |
|---------------------|---------|----|--------|---------|----------|-----------------------|----------------|
| Between Groups      | 13.3808 | 3  | 4.4603 | 9.2624  | < 0.0001 | Reject H <sub>1</sub> | Significant    |
| Within Groups       | 36.5976 | 76 | 0.4815 |         |          |                       |                |
| Total               | 49.9784 | 79 |        |         |          |                       |                |

**Note.** A one-way ANOVA was conducted at an alpha level of .05. Significant findings indicate that at least one group differs significantly from the others. Post hoc comparisons are recommended for significant results.

The one-way analysis of variance (ANOVA) revealed a statistically significant difference in occupational stress among respondents when grouped according to civil status,  $F = 9.2624$ ,  $p < .001$ . Accordingly, the null hypothesis was rejected, indicating that employees with different civil statuses experience occupational stress differently. These findings suggest that marital and family circumstances influence how employees perceive workplace demands and utilize coping resources. Civil status may shape employees' responsibilities both inside and outside the workplace, thereby affecting their overall experience of occupational stress. The findings are likewise consistent with the Work-Family Border Theory (Clark, 2000), which explains that employees continuously navigate the boundaries between work and personal life. Civil status influences the complexity of these boundaries because married individuals, particularly those with caregiving responsibilities, often balance multiple social roles simultaneously. The interaction between work and family domains may therefore contribute to differences in

occupational stress, particularly when employees experience competing responsibilities or limited opportunities for recovery.

The present findings are supported by Bakker and de Vries (2021), who emphasized that occupational stress is influenced not only by workplace demands but also by the availability of personal resources that enable employees to manage competing life responsibilities. Employees with stronger social support systems and effective coping resources are generally more resilient when facing work-related challenges.

**Table 4.3**

*Difference in Occupational Stress Among Respondents Based on Work Industry*

|                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $H_1$ : There is no significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of work industry.   |
| $H_{a1}$ : There is a significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of work industry. |
| $\alpha$ : 0.05                                                                                                                                                           |

| Source of Variation | SS      | df  | MS     | F-value | p-value  | Decision     | Interpretation |
|---------------------|---------|-----|--------|---------|----------|--------------|----------------|
| Between Groups      | 13.9928 | 9   | 1.5548 | 7.1905  | < 0.0001 | Reject $H_1$ | Significant    |
| Within Groups       | 41.0828 | 190 | 0.2162 |         |          |              |                |
| Total               | 55.0756 | 199 |        |         |          |              |                |

**Note.** A one-way ANOVA was performed using an alpha level of .05. Significant findings indicate differences in occupational stress across work industries. Appropriate post hoc analyses should be conducted to determine specific group differences.

The one-way analysis of variance (ANOVA) revealed a statistically significant difference in occupational stress among respondents based on their work industry,  $F = 7.1905$ ,  $p < .001$ . Accordingly, the null hypothesis was rejected, indicating that employees working in different industries experience varying levels of occupational stress. This finding suggests that occupational stress is influenced by the unique characteristics of each industry, including differences in job demands, organizational structures, work environments, and operational

expectations. The present findings are supported by Bakker and de Vries (2021), who emphasized that occupational stress varies across organizational contexts because job demands and available resources differ between occupations and industries. Their work highlights that employees' psychological well-being depends not only on individual coping abilities but also on organizational conditions such as supervisory support, workload distribution, and opportunities for recovery. Similarly, De Sio et al. (2021) reported that psychosocial work environments differ considerably across industries, resulting in significant variations in employees' experiences of occupational stress. Their study demonstrated that industries with higher workload intensity, role ambiguity, and time pressure consistently reported greater levels of occupation

**Table 4.4**

*Difference in Occupational Stress Among Respondents Based on Employee*

*H<sub>1</sub>: There is no significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of employee classification levels.*

*Ha<sub>1</sub>: There is a significant difference in the occupational stress of the respondents when grouped according to their demographic profile in terms of employee classification levels.*

*Alpha: 0.05*

| Source of Variation | SS      | df  | MS     | F-value | p-value | Decision                        | Interpretation  |
|---------------------|---------|-----|--------|---------|---------|---------------------------------|-----------------|
| Between Groups      | 1.0619  | 7   | 0.1517 | 0.2938  | 0.9555  | Failed to Reject H <sub>1</sub> | Not Significant |
| Within Groups       | 78.4823 | 152 | 0.5163 |         |         |                                 |                 |
| Total               | 79.5442 | 159 |        |         |         |                                 |                 |

**Note.** A one-way ANOVA was conducted using an alpha level of .05. A *p* value greater than .05 indicates that no statistically significant differences were observed among employee classifications.

The one-way analysis of variance (ANOVA) revealed no statistically significant difference in occupational stress among respondents based on employee classification level,  $F = 0.2938$ ,  $p = .956$ . Since the obtained *p*-value exceeded the .05 level of significance, the null hypothesis was retained. The findings indicate that employees experienced comparable levels of

occupational stress regardless of their employment classification or organizational rank. This suggests that occupational stress may be influenced more by workplace conditions and organizational practices than by employment status alone. The present findings are consistent with Aronsson et al. (2021), who reported that occupational stress is primarily determined by psychosocial work conditions rather than organizational hierarchy. Their systematic review demonstrated that excessive workload, poor supervisory support, limited autonomy, and unfavorable organizational climates consistently predicted employee stress across occupational groups. Similarly, the American Psychological Association (2023) reported that workload, workplace culture, and organizational support were stronger predictors of employee well-being than employment position or job classification. These findings reinforce the present study by suggesting that employees experience comparable levels of occupational stress when they are exposed to similar organizational demands and resources regardless of their classification level

**Table 5.**

*Difference in the smart-phone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of gender.*

|                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>H<sub>2</sub>: There is no significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of gender.</i> |
| <i>Ha<sub>2</sub>: There is a significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of gender.</i> |
| <i>Alpha: 0.05</i>                                                                                                                                                                               |

| Demographic Variable | Group  | Mean   | t-value | p-value  | Decision              | Interpretation |
|----------------------|--------|--------|---------|----------|-----------------------|----------------|
| Gender               | Male   | 4.2083 |         |          |                       |                |
|                      | Female | 3.9323 | 5.4093  | < 0.0001 | Reject H <sub>2</sub> | Significant    |

**Note.** An independent-samples *t* test was conducted using an alpha level of .05. Statistical significance was determined based on  $p < .05$ .

The independent samples *t*-test revealed a statistically significant difference in smartphone-mediated coping strategies between male and female respondents,  $t = 5.4093$ ,  $p < .001$ . The findings indicate that male respondents reported significantly higher utilization of smartphone-mediated coping strategies than female respondents. This suggests that gender may influence employees' preferences for using smartphones as coping resources when responding to

occupational stress. Specifically, male employees appear to rely more frequently on smartphone-based activities, such as entertainment, digital communication, music, and relaxation applications, as mechanisms for managing work-related stress. The recent evidence also suggests that gender differences in smartphone-mediated coping may reflect broader differences in digital behavior rather than differences in stress itself. Rozgonjuk et al. (2023) found that men were more likely to engage in digital leisure activities, including gaming, streaming, and multimedia consumption, whereas women more frequently used smartphones for maintaining interpersonal relationships and emotional support. These distinct usage patterns may explain why male respondents in the present study reported greater overall smartphone-mediated coping, particularly if entertainment-related coping behaviors contributed substantially to the overall coping score.

**Table 5.1**

*Difference in Smartphone-Mediated Coping Strategies Among Respondents Based on Age*

|                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>H<sub>2</sub>: There is no significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of age.</i> |
| <i>Ha<sub>2</sub>: There is a significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of age.</i> |
| <i>Alpha: 0.05</i>                                                                                                                                                                            |

| Source of Variation | SS     | df | MS     | F-value | p-value  | Decision              | Interpretation |
|---------------------|--------|----|--------|---------|----------|-----------------------|----------------|
| Between Groups      | 4.6782 | 3  | 1.5594 | 36.0661 | < 0.0001 | Reject H <sub>2</sub> | Significant    |
| Within Groups       | 3.2861 | 76 | 0.0432 |         |          |                       |                |
| Total               | 7.9643 | 79 |        |         |          |                       |                |

**Note.** A one-way ANOVA was performed using an alpha level of .05. Significant findings indicate differences among age groups. Post hoc analysis is recommended to identify the specific groups that differ.

The one-way analysis of variance (ANOVA) revealed a statistically significant difference in smartphone-mediated coping strategies among respondents according to age,  $F = 36.0661$ ,  $p$

$< .001$ . Consequently, the null hypothesis was rejected, indicating that employees from different age groups differ in their utilization of smartphones as coping tools for managing occupational stress. The findings suggest that age influences how employees integrate digital technologies into their stress management practices, reflecting differences in technology familiarity, digital competence, and coping preferences across the lifespan. The present findings are supported by Marciano et al. (2022), concluding that digital technologies increasingly function as psychological coping resources by facilitating social connectedness, emotional regulation, and access to mental health information. However, the effectiveness of these technologies depends on users' digital competence and willingness to engage with mobile applications. Similarly, Odgers and Jensen (2020) argued that younger generations are more likely to integrate smartphones into everyday coping because mobile technologies have become embedded within their social, educational, and occupational environments. These findings reinforce the present study by demonstrating that developmental differences in technology use contribute to variations in smartphone-mediated coping across age groups.

**Table 5.2**

*Difference in Smartphone-Mediated Coping Strategies Among Respondents Based on Civil Status*

| Source of Variation | SS      | df | MS     | F-value | p-value    | Decision     | Interpretation |
|---------------------|---------|----|--------|---------|------------|--------------|----------------|
| Between Groups      | 13.3808 | 3  | 4.4603 | 9.2624  | $< 0.0001$ | Reject $H_2$ | Significant    |
| Within Groups       | 36.5976 | 76 | 0.4815 |         |            |              |                |
| Total               | 49.9784 | 79 |        |         |            |              |                |

**Note.** A one-way ANOVA was conducted using an alpha level of .05. Significant results indicate that smartphone-mediated coping strategies differ across civil status groups.

The one-way analysis of variance (ANOVA) revealed a statistically significant difference in smartphone-mediated coping strategies among respondents based on civil status,  $F = 12.9262$ ,  $p < .001$ . Therefore, the null hypothesis was rejected, indicating that employees with different civil statuses vary in their use of smartphones as coping tools for managing occupational stress. The findings suggest that personal and family circumstances shape employees' preferences for digital coping strategies, influencing the extent to which smartphones are utilized for emotional regulation, communication, relaxation, and stress management. Hall et al. (2023) reported that family obligations and perceived social support significantly influence digital communication

behaviors and the use of mobile technologies for maintaining psychological well-being. Employees with greater family responsibilities often use smartphones to coordinate family activities, maintain emotional connections, and access supportive social networks, thereby integrating smartphones into their everyday coping practices. Similarly, Odgers and Jensen (2020) emphasized that digital technologies have become embedded in daily coping processes because they provide immediate access to interpersonal support, health information, and stress management resources. These findings reinforce the present study by demonstrating that smartphone use reflects both technological preferences and the social demands associated with different life circumstances

**Table 5.3**

*Difference in Smartphone-Mediated Coping Strategies Among Respondents Based on Work Industry*

H<sub>2</sub>: There is no significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of work industry.

Ha<sub>2</sub>: There is a significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of work industry.

Alpha: 0.05

**TABLE 22. Difference in the smart-phone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of work industry.**

| Source of Variation | SS      | df  | MS     | F-value | p-value  | Decision              | Interpretation |
|---------------------|---------|-----|--------|---------|----------|-----------------------|----------------|
| Between Groups      | 36.8776 | 9   | 4.0975 | 23.6056 | < 0.0001 | Reject H <sub>2</sub> | Significant    |
| Within Groups       | 32.9807 | 190 | 0.1736 |         |          |                       |                |
| Total               | 69.8583 | 199 |        |         |          |                       |                |

**Note.** A one-way ANOVA was performed using an alpha level of .05. Significant findings indicate differences in smartphone-mediated coping strategies across work industries. Post hoc comparisons are recommended for significant results.

The one-way analysis of variance (ANOVA) revealed a **statistically significant difference** in smartphone-mediated coping strategies among respondents when grouped according to work industry,  $F = 23.6056, p < .001$ . Accordingly, the null hypothesis was rejected, indicating that employees from different industries vary significantly in their reliance on smartphones to cope with occupational stress. These findings suggest that the nature of employees' work environments, industry-specific job demands, and organizational technology practices influence the extent to which smartphones are used as coping resources. The present findings are supported by Marinucci et al. (2023), who found that digital technologies have become important coping resources in contemporary workplaces, particularly in industries characterized by high workloads, rapid communication, and continuous connectivity. Their study demonstrated that employees frequently use smartphones to regulate stress, maintain social support, and recover from demanding work experiences. Industry-specific job characteristics may shape the types of smartphone-mediated coping strategies employees prefer. Employees working in customer-facing industries may use smartphones primarily to seek social support or engage in brief relaxation activities during work breaks, whereas those in technology-oriented occupations may utilize mindfulness applications, productivity tools, or digital wellness platforms. Similarly, Marciano et al. (2022) reported that smartphone-based coping behaviors are influenced by occupational context, with employees in highly digitalized workplaces showing greater reliance on mobile technologies for emotional regulation, communication, and psychological well-being. Likewise, Eurofound (2024) reported that psychosocial risks and digital work practices differ substantially across industries because sectors vary in workload intensity, customer interaction, technological dependence, and organizational flexibility. Employees in service-oriented, healthcare, education, and information technology sectors often experience greater digital engagement as part of their routine work, increasing the likelihood of integrating smartphones into stress management practices. Organizations should therefore tailor digital wellness programs to the unique characteristics of their workforce to promote adaptive coping and enhance employee psychological well-being. To support the statement above, American Psychological Association (2023) found that employees working in fast-paced and technology-driven environments were more likely to utilize digital resources, including smartphone applications, virtual support platforms, and mindfulness tools, to manage occupational stress and maintain psychological well-being.

**Table 5.4**

*Difference in Smartphone-Mediated Coping Strategies According to Employee Classification*

|                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>H<sub>2</sub>: There is no significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of employee classification levels.</i> |
| <i>Ha<sub>2</sub>: There is a significant difference in the smartphone-mediated coping strategies of the respondents when grouped according to their demographic profile in terms of employee classification levels.</i> |
| <i>Alpha: 0.05</i>                                                                                                                                                                                                       |

| Source of Variation | SS      | df  | MS     | F-value | p-value  | Decision              | Interpretation |
|---------------------|---------|-----|--------|---------|----------|-----------------------|----------------|
| Between Groups      | 10.9236 | 7   | 1.5605 | 8.9372  | < 0.0001 | Reject H <sub>2</sub> | Significant    |
| Within Groups       | 26.5407 | 152 | 0.1746 |         |          |                       |                |
| Total               | 37.4643 | 159 |        |         |          |                       |                |

**Note.** A one-way ANOVA was conducted using an alpha level of .05. Significant results indicate differences among employee classification levels. Post hoc analysis is recommended to determine the specific group differences.

The one-way analysis of variance (ANOVA) revealed a **statistically significant difference** in smartphone-mediated coping strategies among respondents based on employee classification level,  $F = 8.9372$ ,  $p < .001$ . Accordingly, the null hypothesis was rejected, indicating that employees occupying different organizational positions vary in their use of smartphones as coping resources. These findings suggest that employee classification influences digital coping behaviors, possibly because organizational roles differ in workload, decision-making responsibilities, work autonomy, and access to technological resources. The findings are further supported by the Conservation of Resources (COR) Theory (Hobfoll, 1989), which proposes that individuals strive to acquire, preserve, and replenish valuable personal resources when confronted with stressful situations. Smartphones may function as accessible coping resources by providing opportunities for emotional regulation, social support, information seeking, relaxation, and temporary psychological detachment from work demands. The present findings are consistent with Marinucci et al. (2023), who reported that employees increasingly rely on digital technologies to regulate occupational stress, particularly in organizations

characterized by high workloads and continuous connectivity. Their study found that employees with greater job responsibilities frequently used smartphones to access communication platforms, mindfulness applications, and digital resources that supported emotional recovery and work-related problem solving.

Employee classification reflects variations in work autonomy, responsibility, and organizational expectations. Employees occupying supervisory or managerial positions often face continuous decision-making, leadership responsibilities, and performance accountability, increasing their reliance on smartphones for communication, scheduling, and rapid access to information. In contrast, employees in non-supervisory positions may use smartphones more frequently for leisure activities, social networking, or entertainment during recovery periods. Although both groups use smartphones to cope with occupational stress, the purposes and patterns of use differ according to the demands associated with their organizational roles. Recent evidence further supports the influence of organizational position on digital coping behaviors. Eurofound (2024) reported that employees in managerial and professional occupations generally experience higher cognitive demands and more frequent digital communication than employees in other occupational groups.

**Table 6**

*Relationship Between Occupational Stress and Smartphone-Mediated Coping Strategies Among Respondents*

*H<sub>3</sub>: There is no significant relationship between occupational stress and smartphone-mediated coping strategies of employees from various work industries*

*Ha<sub>3</sub>: There is a significant relationship between occupational stress and smartphone-mediated coping strategies of employees from various work industries*

| Variables                             | Mean   | Standard Deviation | r-value         | p-value         | Decision              | Interpretation |
|---------------------------------------|--------|--------------------|-----------------|-----------------|-----------------------|----------------|
| Occupational Stress                   | 3.9596 | 0.5814             |                 |                 |                       |                |
| Smartphone-Mediated Coping Strategies | 4.0419 | 0.8112             | 0.29933269<br>8 | 0.00039998<br>3 | Reject H <sub>3</sub> | Significant    |

**Note:** *r* = Pearson product-moment correlation coefficient. Statistical significance was evaluated at an alpha level of .05. Positive *r* values indicate a positive relationship between

*occupational stress and smartphone-mediated coping strategies, whereas negative values indicate an inverse relationship.*

Pearson product-moment correlation analysis revealed a statistically significant positive relationship between occupational stress and smartphone-mediated coping strategies among respondents,  $r = .299$ ,  $p < .001$ . Consequently, the null hypothesis was rejected. Although the correlation was statistically significant, the magnitude of the relationship was weak, indicating that employees experiencing higher levels of occupational stress were somewhat more likely to utilize smartphone-mediated coping strategies. However, the modest strength of the association suggests that smartphone use represents only one of several coping resources employed in managing workplace stress. The findings are best explained by the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), which proposes that individuals continuously evaluate stressful situations and select coping strategies based on their perceived effectiveness and available resources. As occupational stress increases, employees may naturally turn to these readily available digital resources to alleviate emotional strain. Nevertheless, the weak correlation observed in the present study indicates that smartphone-mediated coping is only one component of a broader coping repertoire, and employees simultaneously rely on multiple cognitive, behavioral, and social coping strategies. The present findings are supported by Elhai et al. (2021), who reported that individuals frequently use smartphones to regulate stress and negative emotions because mobile technologies provide immediate access to entertainment, communication, and emotional support. Their review concluded that stress-related coping motives consistently predict smartphone use, although digital coping is often combined with other adaptive coping behaviors. Similarly, Marciano et al. (2022) found that digital media increasingly serve as psychological coping resources by promoting emotional regulation, social connectedness, and access to mental health information. However, they also emphasized that smartphone use should be viewed as one component of a broader coping process rather than a complete solution to occupational stress. Overall, the findings demonstrate that occupational stress is positively associated with smartphone-mediated coping strategies, indicating that employees increasingly utilize smartphones when responding to workplace stress. To support the statement, the American Psychological Association (2023) reported that employees experiencing workplace stress often combine digital coping strategies with traditional approaches such as physical activity, interpersonal support, mindfulness practices, and professional mental health services. These findings reinforce the present study by suggesting that smartphone-mediated coping complements rather than replaces other adaptive coping mechanisms.

### **Summary of Findings**

This study examined the relationship between occupational stress and smartphone-mediated coping strategies among employees from various work industries. Specifically, it investigated the respondents' level of occupational stress, the extent of their smartphone-mediated coping strategies, the differences in these variables according to selected demographic

characteristics, and the relationship between occupational stress and smartphone-mediated coping. The findings provide empirical evidence that occupational stress and smartphone use are interconnected, although employees' coping behaviors are influenced by multiple demographic and organizational factors.

The findings revealed that employees generally experienced a moderate level of occupational stress across the identified stress dimensions. Although occupational stress was present, the results suggest that respondents were able to maintain manageable levels of stress despite workplace demands. This finding indicates that occupational stress remains a common workplace experience but does not necessarily become overwhelming when employees possess adequate coping resources and organizational support. Consistent with the Job Demands–Resources Model, employees continually balance workplace demands with available personal and organizational resources to maintain psychological well-being.

The study likewise found that respondents demonstrated a high level of smartphone-mediated coping strategies, indicating that smartphones have become important tools for managing workplace stress. Employees frequently relied on smartphones for communication, entertainment, emotional regulation, social support, relaxation, and information seeking. These findings support the growing recognition of smartphones as accessible coping resources that complement traditional stress-management practices. Consistent with the Transactional Model of Stress and Coping, employees actively select coping strategies that they perceive as effective and readily available within their daily work environment.

The analyses further demonstrated that occupational stress differed across several demographic characteristics. Significant differences were observed according to age, civil status, and work industry, whereas no significant difference was found based on gender and employee classification. These findings suggest that occupational stress is influenced more by employees' life stage, personal responsibilities, and occupational context than by biological sex or organizational rank alone. Differences in workplace experiences, family obligations, and industry-specific job demands appear to shape employees' perceptions of occupational stress.

Similarly, smartphone-mediated coping strategies varied significantly across demographic groups. Gender, age, civil status, work industry, and employee classification all influenced employees' reliance on smartphones as coping resources. These findings indicate that digital coping behaviors are shaped by both personal characteristics and organizational contexts. Employees differ in their technology use, coping preferences, digital competence, and workplace responsibilities, all of which influence the manner in which smartphones are integrated into stress-management practices. These results further support the Technology Acceptance Model by demonstrating that the perceived usefulness and accessibility of smartphone technologies vary among different groups of employees.

Finally, the study established a positive and statistically significant relationship between occupational stress and smartphone-mediated coping strategies. Employees experiencing higher levels of occupational stress were more likely to utilize smartphones as coping resources. However, the relatively weak magnitude of the relationship indicates that smartphone-mediated coping represents only one component of employees' broader coping repertoire. Occupational stress is influenced by multiple psychological, organizational, and social factors, and employees

typically combine smartphone use with other adaptive coping strategies, including social support, problem-focused coping, emotional regulation, physical activity, and organizational resources. These findings reinforce the Transactional Model of Stress and Coping and the Job Demands–Resources Model by demonstrating that effective stress management results from the interaction of personal coping resources and supportive work environments rather than reliance on a single coping mechanism.

Overall, the study contributes to the growing body of literature on occupational stress and digital coping by demonstrating that smartphones have become meaningful coping resources within contemporary workplaces. Nevertheless, smartphone-mediated coping should not be regarded as a substitute for comprehensive organizational stress-management initiatives. Instead, organizations should integrate evidence-based digital wellness programs with supportive leadership, healthy work environments, employee assistance services, and work-life balance initiatives to strengthen employee resilience and promote long-term psychological well-being. The findings provide valuable implications for organizational leaders, human resource practitioners, mental health professionals, and future researchers seeking to understand the evolving role of digital technologies in occupational stress management.

## References

- American Psychological Association. (2023). *Workplace mental health and well-being survey*.  
<https://www.apa.org/pubs/reports/workplace-mental-health>
- Aronsson, G., Theorell, T., Grape, T., Hammarström, A., Hogstedt, C., Marteinsdottir, I., & Hall, C. (2021). A systematic review including meta-analysis of work environment and burnout. *BMC Public Health*, 21(1), Article 825. <https://doi.org/10.1186/s12889-021-10897-x>
- Bakker, A. B., & de Vries, J. D. (2021). Job Demands–Resources theory and self-regulation: New explanations and remedies for job burnout. *Anxiety, Stress, & Coping*, 34(1), 1–21. <https://doi.org/10.1080/10615806.2020.1797695>
- Bennett, A. A., Bakker, A. B., & Field, J. G. (2022). Recovery from work-related effort: A meta-analysis. *Journal of Applied Psychology*, 107(6), 1009–1036. <https://doi.org/10.1037/apl0001009>
- Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations*, 53(6), 747–770. <https://doi.org/10.1177/0018726700536001>
- Congressional Policy and Budget Research Department. (2024a). *Philippine country profile in the Digital 2024 report* (Fact Sheet No. 2024-21). House of Representatives, Republic of the Philippines. <https://cpbrd.congress.gov.ph>
- Congressional Policy and Budget Research Department. (2024b). *The digital divide in the Philippines* (Fact Sheet No. 2024-10). House of Representatives, Republic of the Philippines. <https://cpbrd.congress.gov.ph>
- DataReportal. (2026). *Digital 2026: The Philippines—Global digital overview*.  
<https://datareportal.com/reports/digital-2026-philippines>
- de Bloom, J., Kinnunen, U., & Korpela, K. (2021). Recovery from work: Testing theoretical assumptions. *Journal of Organizational Behavior*, 42(2), 273–289. <https://doi.org/10.1002/job.2492>
- De Sio, S., Cedrone, F., Sanità, D., Ricci, P., Corbosiero, P., Di Traglia, M., Greco, E., & Stansfeld, S. (2021). Quality of life in workers and stress: A systematic review. *International Journal of Environmental Research and Public Health*, 18(12), Article 6298. <https://doi.org/10.3390/ijerph18126298>
- De Witte, H., Desart, S., & Schaufeli, W. B. (2022). Burnout 2.0: A new look at the conceptualisation and measurement of burnout. *Journal of Work and Organizational Psychology*, 38(1), 15–28. <https://doi.org/10.5093/jwop2022a3>
- Edmondson, A. C., & Mortensen, M. (2021). What psychological safety looks like in a hybrid workplace. *Harvard Business Review*, 99(2), 58–67.

- Elhai, J. D., Yang, H., & Levine, J. C. (2022). Problematic smartphone use and mental health problems: Current state of research. *Current Opinion in Psychology*, 36, 1–6. <https://doi.org/10.1016/j.copsyc.2020.03.007>
- Eurofound. (2024). *Telework and hybrid work in Europe: Implications for stress and well-being*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2806/84931>
- Flett, G. L., Hewitt, P. L., & Nepon, T. (2022). Perfectionism, anxiety, and digital connectivity in young adults. *Personality and Individual Differences*, 185, Article 111248. <https://doi.org/10.1016/j.paid.2021.111248>
- Goel, P., & Verma, S. (2021). Technostressors and employee performance: A systematic literature review and framework development. *Computers in Human Behavior Reports*, 4, Article 100122. <https://doi.org/10.1016/j.chbr.2021.100122>
- Grandey, A. A., & Melloy, R. C. (2020). Emotional labor in the 21st century: Diverse perspectives on emotional regulation at work. *Annual Review of Organizational Psychology and Organizational Behavior*, 7(1), 219–244. <https://doi.org/10.1146/annurev-orgpsych-012119-044951>
- Hall, J. A., Pennington, N., & Lueders, A. (2021). Daily social media use and well-being: A daily diary study. *Journal of Social and Personal Relationships*, 38(3), 855–875. <https://doi.org/10.1177/0265407520978523>
- Hall, M. C., McMichael, S. L., & Kwan, V. S. Y. (2023). Effects of a brief exposure to nature or social media on psychological well-being. *Modern Psychological Studies*, 29(1), Article 3. <https://scholar.utc.edu/mps/vol29/iss1/3>
- Heckhausen, J., Wrosch, C., & Schulz, R. (2020). A motivational theory of life-span development: 10 years later. *Motivation and Emotion*, 44(1), 1–16. <https://doi.org/10.1007/s11031-019-09797-5>
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Huberty, J., Green, J., Glissmann, C., & Larkey, L. (2021). Efficacy of the Calm app for reducing stress and improving well-being in college students: Randomized controlled trial. *JMIR mHealth and uHealth*, 9(4), Article e25488. <https://doi.org/10.2196/25488>
- Inceoglu, Z., Thomas, G., Chu, C., Plans, D., & Geraghty, A. W. (2021). Digital health interventions for workplace stress management: Systematic review and meta-analysis. *Journal of Medical Internet Research*, 23(7), Article e26082. <https://doi.org/10.2196/26082>
- Kim, S. (2022). Digital overload, boundary permeability, and employee well-being in remote work. *Information Technology & People*, 35(5), 1542–1560. <https://doi.org/10.1108/ITP-08-2020-0589>

- Krause, H. V., Baum, K., & Reinecke, L. (2021). Digital well-being and self-control: A systematic review. *Media and Communication*, 9(2), 170–181.  
<https://doi.org/10.17645/mac.v9i2.3801>
- Kundi, Y. M., Abana, Q. A., & Khan, A. (2021). Technostress creators and employee performance: The moderating role of digital literacy. *Information Systems Journal*, 31(6), 890–915. <https://doi.org/10.1111/isj.12338>
- Kushlev, K., & Leita, M. R. (2020). The effects of smartphones on well-being: Theoretical integration and research agenda. *Current Opinion in Psychology*, 36, 77–82.  
<https://doi.org/10.1016/j.copsyc.2020.05.001>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Lesiuk, T. (2021). Music therapy and digital mindfulness interventions for stress reduction at work. *Arts in Psychotherapy*, 75, Article 101820.  
<https://doi.org/10.1016/j.aip.2021.101820>
- Liu, X. F., Zhang, Y., & Huang, Z. (2023). Behavioral patterns of smartphone use as coping mechanisms during COVID-19. *EPJ Data Science*, 12(1), 1–18.  
<https://doi.org/10.1140/epjds/s13688-023-00381-1>
- Marciano, L., Camerini, A. L., & Morese, R. (2022). Digital media use and adolescents' mental health: A systematic review and meta-analysis of longitudinal studies. *Frontiers in Public Health*, 10, Article 818029. <https://doi.org/10.3389/fpubh.2022.818029>
- Marinucci, M., Pancani, L., & Riva, P. (2023). Social exclusion and digital technology: A review of psychological effects. *Computers in Human Behavior*, 139, Article 107521.  
<https://doi.org/10.1016/j.chb.2022.107521>
- Mazzetti, G., Robledo, E., & Vignoli, M. (2023). Work engagement and technostress: A moderated mediation model. *Work & Stress*, 37(2), 189–208.  
<https://doi.org/10.1080/02678373.2022.2134501>
- Meltwater. (2025). *Global digital insights report 2025*.  
<https://www.meltwater.com/en/reports/digital-insights>
- Montano, D., Reeske, A., & Franke, F. (2022). Workplace health promotion and employee well-being: A meta-analysis. *Journal of Occupational Health*, 64(1), Article e12310.  
<https://doi.org/10.1002/1348-9585.12310>
- Nielsen, K., Yarker, J., & Munir, F. (2023). Implementing workplace health interventions: A systematic review of process evaluations. *Work & Stress*, 37(1), 1–25.  
<https://doi.org/10.1080/02678373.2022.2081502>
- Odgers, C. L., & Jensen, M. R. (2020). Annual research review: Adolescent mental health in the digital age. *Journal of Child Psychology and Psychiatry*, 61(3), 336–348.  
<https://doi.org/10.1111/jcpp.13190>

- Philippine News Agency. (2024, November 12). *DOLE underscores mental health support for digital and remote workers*. Republic of the Philippines. <https://www.pna.gov.ph>
- Philippine Statistics Authority. (2024). *2024 Annual survey of Philippine business and industry: Information and communication sector*. Government of the Philippines. <https://psa.gov.ph>
- Rozgonjuk, D., Levine, J. C., & Elhai, J. D. (2023). Problematic smartphone use, technostress, and mental health: A cross-cultural analysis. *Cyberpsychology, Behavior, and Social Networking*, 26(5), 321–330. <https://doi.org/10.1089/cyber.2022.0210>
- Sorokowski, P., & Sobczak, A. (2025). Digital technology use, social interaction, and mental health outcomes in young adults: A prospective cohort study. *Computers in Human Behavior*, 162, Article 108412. <https://doi.org/10.1016/j.chb.2024.108412>
- Statista. (2025). *Social media and digital usage statistics in the Philippines 2025*. <https://www.statista.com>
- Tribune. (2025, January 15). Addressing digital burnout and mental wellness in the modern workforce. *Daily Tribune Philippines*. <https://tribune.net.ph>
- United Nations Population Fund. (n.d.). *Youth and the digital revolution in developing nations*. <https://www.unfpa.org/digital-youth>
- Wang, C., Zhang, Y., & Liu, X. (2024). Algorithmic management, technostress, and employee psychological strain. *Information & Management*, 61(2), Article 103901. <https://doi.org/10.1016/j.im.2023.103901>
- We Are Social, & Meltwater. (2025). *Digital 2025: Global overview report*. <https://wearesocial.com/digital-2025>
- Wolfers, L. N., Kitzmann, S., & Sauer, S. (2023). Parental digital stress and child well-being: A daily diary approach. *Journal of Family Psychology*, 37(3), 345–356. <https://doi.org/10.1037/fam0001065>
- Wolfers, L. N., & Schneider, F. M. (2021). Using media for coping: A scoping review. *Communication Theory*, 31(2), 229–250. <https://doi.org/10.1093/ct/qtaa011>
- Wolfers, L. N., & Yang, Q. (2025). Digital stress and coping mechanisms across life stages: A systematic integration. *Media Psychology*, 28(1), 88–112. <https://doi.org/10.1080/15213269.2024.2389100>
- World Health Organization, & International Labour Organization. (2022). *Mental health at work: Policy brief*. <https://www.who.int/publications/i/item/9789240057944>
- Yildirim, C., Sumuer, E., & Adnan, M. (2023). Nomophobia and technostress in modern workplaces: A structural equation modeling approach. *Telematics and Informatics*, 78, Article 101950. <https://doi.org/10.1016/j.tele.2023.101950>

