EXAMINING WORK STRESS AND BURNOUT IN PUBLIC ADMINISTRATION: THE CASE OF LOCAL GOVERNMENT EMPLOYEES

Vasiliki Tsipouri *, Panagiota I. Xanthopoulou **, Alexandros G. Sahinidis ***, Christina D. Patitsa **, Michail Chalaris ****, Stavros Kalogiannidis *****

* Neapolis University of Pafos, Pafos, Cyprus

** Department of Business Administration, University of West Attica, Athens, Greece

*** Corresponding author, Department of Business Administration, University of West Attica, Athens, Greece

Contact details: Department of Business Administration, University of West Attica, 250 Thivon & P. Ralli str., Egaleo 12241, Athens, Greece

**** Department of Chemistry, International Hellenic University, Thermi, Greece

**** Department of Business Administration, University of Western Macedonia, Grevena, Greece



How to cite this paper:

Tsipouri, V., Xanthopoulou, P. I., Sahinidis, A. G., Patitsa, C. D., Chalaris, M., & Kalogiannidis, S. (2024). Examining work stress and burnout in public administration: The case of local government employees. *Journal of Governance & Regulation*, 13(2), 210–222. https://doi.org/10.22495/jgrv13i2art21

Copyright © 2024 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). https://creativecommons.org/licenses/by/4.0/

ISSN Online: 2306-6784 ISSN Print: 2220-9352

Received: 01.01.2024 **Accepted:** 03.05.2024

JEL Classification: H83, J28, J63, J81 DOI: 10.22495/jgrv13i2art21

Abstract

Work stress and burnout are critical factors affecting employees' well-being and performance (Meeusen et al., 2023). This qualitative study delves into the pervasive issue of work stress and burnout among municipal employees within the Municipality of Xanthi, Greece. By conducting structured interviews with 42 employees, the study aims to comprehend their experiences, perceptions, and responses to work-related stressors. Key findings highlight significant concerns among public employees regarding administrative decisions, staffing limitations, and ensuing work pressures, leading to heightened stress levels and, in some instances, burnout symptoms. Notably, 19 percent of employees with limited tenure expressed contentment with their work conditions. Moreover, the unprecedented challenges posed by the COVID-19 pandemic amplified work stress through increased workloads and novel professional demands (Montazer et al., 2024). Employee-generated recommendations primarily revolve around augmenting staff recruitment and continuous training initiatives. Additionally, the presence of counsellors or psychologists emerged as a pivotal support system for the workforce. These findings underscore the urgent need for proactive measures and support interventions within the Greek public administration, particularly in primary local government organizations like municipal bodies. This study's insights serve as a valuable resource for cultivating healthier work environments and fostering employee well-being.

Keywords: Public Administration, Work Stress, Burnout, Qualitative Study, Local Government, Municipality of Xanthi

Authors' individual contribution: Conceptualization — V.T. and P.I.X.; Methodology — V.T., P.I.X., and A.G.S.; Software — V.T. and P.I.X.; Validation — C.D.P., M.C., and S.K.; Formal Analysis — V.T.; Investigation — V.T.; Resources — P.I.X. and A.G.S.; Data Curation — V.T. and C.D.P.; Writing — Original Draft — V.T. and P.I.X.; Writing — Review & Editing — P.I.X. and A.G.S.; Visualization — M.C. and S.K.; Supervision — P.I.X.; Project Administration — P.I.X.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

Acknowledgements: We would like to express our sincere gratitude to the Municipality of Xanthi and its employees for their invaluable cooperation and participation in this research endeavor. Without their willingness to share their insights and experiences, this study would not have been possible.

1. INTRODUCTION

Work stress and burnout concern a large percentage of people employed in the new working conditions that have been formed due to many changes in the external environment, with the recent example of the current pandemic crisis (Sotiropoulou et al., 2023). The purpose of the present study is to investigate the work stress that evolves into burnout in public employees and more specifically in local government employees. Taking these into account the specific objectives of the present research are:

- To carry out a detailed examination and analysis of the factors that increase work stress and burnout in local government.
- To investigate how the COVID-19 pandemic has affected work stress in public administration, focusing on local government employees.
- To study the views of employees regarding work stress and burnout and to discuss relevant proposals for improving these conditions.

 This specific study is an empirical qualitative

research through structured interviews that were carried out among the employees of a Greek Municipality. The societal and economic domains within various countries are confronted with prevalent concerns surrounding work-related stress and burnout (Marazziti et al., 2020). This study demonstrates distinct importance and originality through its empirical qualitative methodology utilizing structured interviews among local government employees, contributing to an underexplored area of research (Crawford & Detar, 2023). While studies been conducted in the Greek public administration, focusing on sectors like public education and health (Anastasiou & Bellios, 2020; Galanakis et al., 2020; Adamopoulos & Syrou, 2022), there exists a unique gap pertaining to local authorities. This research aims to fill this gap by focusing on municipal employees, a sector integral to community engagement, often dealing with high levels of responsibility and extensive interactions. The research questions are the following:

RQ1: What are the views of municipal employees regarding the levels of work stress and burnout in the public sector?

RO2: How has the COVID-19 nandemic contributed to the increase in work stress among civil servants?

RQ3: What proposed solutions are the employees of the local government to reduce these problems?

The structure of the paper consists of five sections. Section 1 is the introduction part where the main objectives, the research aim and questions as well as the contribution and the originality of are presented. Section 2 the study includes the theoretical part of the study. Next, Section 3 describes the methodology of the qualitative research that was implemented. Section 4 presents and discusses the results of the qualitative research. Section 5 concludes the paper with relevant suggestions for future research.

2. LITERATURE REVIEW

2.1. Work-related stress and burnout in the public sector

The conceptualization of work stress lacks a universally agreed-upon definition in the literature, leading to challenges in its precise characterization despite its widespread recognition (Sager & Wilson, 1995). The variability in defining work stress stems from divergent approaches adopted by different researchers. Although work encompasses the causes and effects affecting employees' performance (Meeusen et al., 2023) and overall health, determining whether specific work environment, conditions, the environmental elements, or other internal factors are accountable remains undetermined (Antoniou & Koronaiou. 2018). The World Health Organization characterizes occupational stress as the detrimental physical and psychological reactions resulting from mismatches between employees' abilities, needs, or available resources and job demands, leading to health issues or injuries (Leka et al., 2003; Chatzigianni et al., 2018). Recognized as a global challenge, work stress is defined as human reactions to overwhelming pressures and demands prevailing in the workplace (Antoniou & Koronaiou, 2018; Galanakis et al., 2020).

The widely accepted definition of burnout, as presented by psychologist Christine Maslach in 1982, refers to the non-positive sentiments, such as a lack of respect or empathy for patients or clients, emerging in an employee following extensive physical and emotional exhaustion, accompanied by diminished interest in colleagues (Maslach & Leiter, 2008; Maslach, 1982; Martínez-López et al., 2020). Maslach (1982) conceptualized burnout as a three-dimensional syndrome characterized depersonalization, emotional exhaustion, reduced personal fulfilment in employees having regular and direct interactions with patients or clients (Martínez-López et al., 2020; Katsiana et al., 2021). It primarily surfaces among professionals engaged in roles requiring extensive interaction with individuals experiencing high levels of trauma, either physical or psychological in nature (Roberts et al., 2021). Prolonged exposure to work stress often culminates in burnout, a term established in the field of occupational medicine (Sikaras et al., 2022).

Many scholars have addressed and proven the connection between work stress and burnout (Shoman et al., 2021; Galanakis et al., 2020; Anastasiou & Bellios, 2020). The result of long-term work stress is burnout and its effects are low quality at work, intense dissatisfaction and repeated absences from it, culminating in the desire to leave work, various family problems and a generally low quality of life (Shoman et al., 2021; Xanthopoulou & Sahinidis, 2022: Sotiropoulou et al., 2023: Galanakis et al., 2020). In addition, the study by Shoman et al. (2021) reinforce the view that burnout is the reaction response to the high work stress created by and in the work to fulfil the demands. Therefore, work stress was positively associated with burnout (Shoman et al., 2021; Tsigilis et al., 2006). Another part of the public sector more specifically nurses and nursing assistants was studied by many scholars such as Bazmi et al. (2019) and Chatzigianni et al. (2018), revealing that dealing with death in combination with the demands of patients and their families as well as the uncertain effectiveness of treatments, are the more stressful factors. In public health, a strong connection was observed between work stress and burnout of public health workers (Adamopoulos & Syrou, 2022).

From all of the above, it can be seen that the connection between work stress and burnout exists and appears more strongly in professions where there is high pressure and intense competition (employees in law offices, bank employees, and workers in multinational companies). Excluding teachers and health workers, who have been researched to the greatest extent, burnout occurs within the public sector as a result of work stress in professions such as police, firemen and the military, but also in social service workers (psychologists and social workers) who work in prisons and in places where there are violently displaced people (immigrants) (Roberts et al., 2021; Linos et al., 2022).

2.2. Research on the Greek public administration

Several studies have been carried out in the Greek public administration such as those of Galanakis et al. (2020), Anastasiou and Bellios (2020), Chatzigianni et al. (2018), Adamopoulos and Syrou (2022), with particular emphasis on employees serving in the health and education in the public sector, highlighting how affected employees are when interacting with many people and to what extent they feel work stress and burnout. Among the most recent studies is the literature review by Adamopoulos and Syrou (2022), which was carried out in the field of public health and shows the correlation that exists between work stress, job satisfaction and exhaustion felt by workers in this field. At the same time, it was found that there is an influence of the work environment (demographic element) on work stress, job satisfaction and burnout felt by health workers (Adamopoulos & Syrou, 2022). The research by Ntantana et al. (2017) was carried out with a sample of 149 doctors and 320 nurses. The results show that more than one fourth of the workers suffer from burnout, with higher levels of burnout in nurses than doctors. Therefore, there is a better and more effective treatment of the feelings of work stress and burnout, the higher the educational level to which the health worker belongs. Also, the research found that job satisfaction significantly affects the level of burnout felt by public health workers (Ntantana et al., 2017; Adamopoulos & Syrou, 2022).

A study by Kourmousi and Alexopoulos (2016) showed that Greek teachers of primary and secondary education in the public sector show low work stress and burnout compared to teachers in the world. However, an increased level of job stress is observed in young, newly appointed female teachers who take on the task of teaching children with learning difficulties. Therefore, the factors that affect work stress are many and concern the years and level of teaching as well as the professional situation in which the teacher is. At the same time, the way in which people with increased work stress are supported, by their colleagues and their superiors, appears to be a "work shield" that protects them from manifesting work stress and burnout (Kourmousi & Alexopoulos, 2016). Previous research has shown that teachers experience moderate levels of emotional exhaustion and that public teachers experience significantly less job stress and more job satisfaction than their counterparts working in the private sector (Tsigilis et al., 2006; Xanthopoulou, 2020). It is established that occupational stress has an influence on nursing staff in the public sector in Greece (Chatzigianni et al., 2018). A current pilot study by Adamopoulos et al. (2022) was carried out in the 1st quarter of 2021 among the public health inspectors of Greece where it was found that the latter face various occupational hazards that lead to burnout and emotional exhaustion. The most prevalent hazards that contribute to increasing burnout and burnout are ergonomic and psychosocial hazards, such as poor posture and emotional burden on workers (Adamopoulos et al., 2022).

Findings on Greek local government employees are almost non-existent, particularly in the case of Greece where no surveys have been carried out on Greek municipal employees. Few researches concerning European Union countries such as Veromaa et al. (2017), Penttinen et al. (2021) and Asplund et al. (2022). The study by Veromaa et al. (2017) investigated physical and mental health factors and how these factors relate to work engagement in Finnish municipal employees. The conclusions of the research show that physical as well as mental factors are positively related to work engagement. However, when even one of the psychosocial risk factors is present then there is a negative correlation of commitment to work and a change in correlations (Veromaa et al., 2017). Penttinen et al. (2021) examined Finnish municipal employees regarding the existence of burnout in relation to healthy eating. Finally, Asplund et al. (2022) studying municipal employees working in rural areas in Sweden, highlighted the importance of recognizing the physical as well as mental strain of municipal employees working in a stressful environment. They additionally found that their health, their personal lives and their ability to remain effective at work are greatly affected by the unbalanced relationship between the resources given and the demands of their work.

Therefore, in order to prevent work stress and reduce burnout, it is important to improve the work environment through supportive methods on the part of the leadership and through the control of work demands (Asplund et al., 2022; Rajesh et al., 2023).

2.3. The effects of the COVID-19 pandemic on the work stress of public administration employees

The COVID-19 pandemic led to an unprecedented global crisis of a health and economic nature that created various problems for people all over the world such as depression, health issues, and anxiety and generally brought to the surface and worsened pre-existing mental problems (Montazer et al., 2024; Xanthopoulou, 2022; Koutsimani et al., 2019; Sikaras et al., 2022; Adamopoulos et al., 2022; Schuster et al., 2020). Dominant sources of stress for health workers are the risk of infection and transmission of the virus and the lack of personal protective equipment (PPE). However, researchers associate burnout with low earnings, minimal work control, lack of recognition from work, and end-of-life care (Rachiotis et al., 2014; Martínez-López et al., 2020; Adamopoulos & Syrou, 2022; Adamopoulos et al., 2022; Gribben & Semple, 2021; Niven & Sessler, 2022). Other reasons for increased work stress for many employees were the travel restrictions and forced social distancing imposed by government agencies during the pandemic as measures to deal with the transmission of the virus. Due to these measures, almost all the employees suffered a launch of their duties, forcing them to work in the new working conditions telecommuting — with simultaneously high quality in the services provided. Employees feel that they

are constantly on alert due to their constant presence in the digital space and thus the use of technology increases work stress, leading to burnout (Xanthopoulou, 2020; Sciepura & Linos, 2022; Latsou et al., 2022; Xanthopoulou, 2022; Saraswati & Ariwibowo, 2023). The understaffing and underfunding of organizations have always created various problems but worsened the existing work situation and burdened workers with additional work stress and burnout during the pandemic years. (Adamopoulos et al., 2023; Montazer et al., 2024). In contrast to the overwork of some people, many employees have lost their jobs during the pandemic crisis due to state-imposed work suspensions, and their concern for their survival and future has increased. At the same time, job instability caused problems in economic stability and increased work stress (Marazziti et al., 2020; Linos et al., 2022; Montazer et al., 2024).

During the pandemic, the mental health of public sector workers was studied, with particular emphasis on the importance of employees' mental health in order to remain healthy and improve their work performance (Suwiknyo, 2022; Sciepura & Linos, 2022). The pandemic brought about big changes not only in the health sector but also in the general working environment and there was a need for the whole society and the state to think again about the role of fatigue and work stress and the direct relationship these concepts have with the professional burnout (Martínez-López et al., 2020; Adamopoulos & Syrou, 2022; Anyfantis & Biska, 2018; Sikaras et al., 2022). Therefore, during the pandemic and after, the quality of working life of all employees was investigated due the escalation of occupational stress and burnout. Due to the stressful conditions, many mental disorders and physical attacks were observed in the health workers as well as in the rest of the workers (Latsou et al., 2022; Bellali et al., 2020).

3. RESEARCH METHODOLOGY

The research used a qualitative method with structured interviews to study work stress and burnout among local government employees. All of the participants work at the Municipality of Xanthi; however, they have also previously worked in different organizations of the Greek local government. Building on Bryman (1992), the use of qualitative methods enables an understanding of the meanings sought by the participants. The research focuses on analyzing the factors that create work stress and burnout, while also examining the role of COVID-19 in them. interview chosen The structured was the guaranteed reliability of the results (Corrington, 2022). The process included six stages, according to Braun and Clarke's (2006) model:

- 1) Familiarization with the data.
- 2) Generation of initial codes.
- 3) Search for themes by collating codes into potential themes.
- 4) Review of themes and possible reordering of topics to eliminate overlaps.
 - 5) Definition and naming of themes.
 - 6) Final analysis.

The population of the research is the public servants and the sample consists of people who work in the Municipality of Xanthi regardless of the employment relationship or the specialty to

which they belong. The Municipality of Xanthi belongs to the Local Self-Government and, more specifically, it is an A-grade local government organization. It is a relatively small agricultural municipality that belongs to the Region of Eastern Macedonia and Thrace and additionally, there is a population peculiarity due to the coexistence of Christians and Muslims in the region. A total of 42 structured interviews were conducted and the demographic information of the sample is presented in the following Table 1.

Table 1. Demographics

No.	Gender	Age group	Level of education
S1	Male	> 46 years old	Master
S2	Male	36-45 years old	Bachelor
S3	Female	> 46 years old	Master
S4	Male	> 46 years old	Bachelor
S5	Female	> 46 years old	Master
S6	Male	> 46 years old	High school
S7	Male	> 46 years old	High school
S8	Male	> 46 years old	High school
S9	Female	36-45 years old	Bachelor
S10	Female	36-45 years old	Master
S11	Male	> 46 years old	High school
S12	Female	> 46 years old	Master
S13	Female	> 46 years old	Master
S14	Female	> 46 years old	Bachelor
S15	Female	> 46 years old	Bachelor
S16	Male	> 46 years old	Bachelor
S17	Female	> 46 years old	High school
S18	Male	> 46 years old	High school
S19	Female	> 46 years old	Master
S20	Female	> 46 years old	High school
S21	Male	36-45 years old	High school
S22	Female	> 46 years old	High school
S23	Female	> 46 years old	High school
S24	Female	36-45 years old	PhD
S25	Female	> 46 years old	Bachelor
S26	Male	> 46 years old	High school
S27	Female	> 46 years old	High school
S28	Male	> 46 years old	High school
S29	Female	> 46 years old	High school
S30	Female	> 46 years old	Master
S31	Male	> 46 years old	Primary school
S32	Female	> 46 years old	High school
S33	Female	> 46 years old	High school
S34	Female	> 46 years old	Bachelor
S35	Male	> 46 years old	High school
S36	Male	> 46 years old	High school
S37	Male	> 46 years old	High school
S38	Female	> 46 years old	High school
S39	Female	> 46 years old	Bachelor
S40	Male	> 46 years old	High school
S41	Male	> 46 years old	Master
S42	Male	36-45 years old	High school

Source: Authors' calculation.

As delineated by Pace (2021), the categorization of sampling techniques comprises two fundamental classifications: probability and non-probability methods. The present research adopted convenience sampling as a fitting non-probability sampling method, characterized by the selection of units on their convenient accessibility the researchers. Concurrently, to augment the sample size and participation, the snowball technique was employed. This method involved the distribution of interview questions among initially colleagues online, who subsequently forwarded these queries to additional colleagues not originally chosen for participation. According to the literature, there is no pre-agreed number of participants to make an appropriate sample size, but the correct sample size depends on a variety of factors (Muthén & Muthén, 2002). Ultimately, an expanded sample size contributes to a heightened potential for increased accuracy and precision in the obtained results (Xanthopoulou, 2022).

Three distinct interview methods were employed. The initial approach involved the researcher personally directing questions to participants who lacked familiarity with technology, recording responses, and subsequently transferring the data to Google Forms. The second method entailed providing printed forms of the interview questions to individuals less acquainted with technology, enabling them to independently record their responses, thereby allowing for the expression of their well-considered thoughts. Lastly, a widely utilized approach involved the dissemination of interview inquiries through an online platform utilizing Google Forms. Responses were submitted in written form, which is a better way to familiarize researchers with the data. Written answers are the most appropriate and effective way to collect data faster and to ensure better quality in the answers as rich descriptive information is given by the interviewees (Xanthopoulou & Sahinidis, 2022; Letherby & Zdrodowski, 1995). Admittedly, transcribing verbal interviews into written texts and then extracting key themes from these texts constitutes a large amount of qualitative research, but written responses provide data that can be easily understood and analyzed (Letherby Zdrodowski, 1995).

A thorough investigation into work-related stress and burnout among municipal government employees may benefit from the use of alternative techniques like mixed-method studies or quantitative surveys. A larger sample of participants from a variety of local government organizations could be obtained through quantitative surveys, which would also make statistical analysis easier to find patterns and relationships. Also, a mixed approach would strengthen the findings' robustness.

4. RESULTS AND DISCUSSION

The NVivo program was used to analyze the raw data. Researchers tend to prefer the use of NVivo (Li & Zhang, 2022) as it covers the main aspects of the research process and more specifically: data analysis, theoretical development, and finally the presentation of findings (Dalkin et al., 2020; Xanthopoulou & Sahinidis, 2022).

4.1. The first research question: Discussion of the results

In this study, the qualitative research method was employed, utilizing a concurrent approach that involved the simultaneous presentation of findings alongside their discussion. This practice, advocated by Burnard et al. (2008), involves integrating the discussion of results with their presentation, thereby enabling readers to gain a more comprehensive understanding by coupling the results with their interpretations (Taherdoost, 2022; Burnard et al., 2008).

Based on the first research question, the participants were asked the following questions:

- What is your opinion on working conditions in the public sector? How would you describe the working conditions in the Municipality where you work?
- Do you think that in your organization you experience the feeling of work stress? If so, in what ways?

Based on the responses obtained from participants, the relative codes of the first research question are given below:

- Management of the organization;
- Lack of meritocracy;
- Lack of specialization-training;
- Work accidents;
- Attribution of failure:
- The large amount of work;
- Failure to provide proper equipment;
- Family problems;
- Pressure from deadlines;
- Lots of items;
- Complexity of laws;
- Cooperation problems;
- Citizen behavior;
- Frequent work mistakes;
- Physical fatigue;
- Disbanded services;
- Understaffing;
- Mental fatigue.

The majority of participants answered that the levels of work stress and burnout in the Municipality of Xanthi are due to the decisions of the organization's management. This particular finding confirms the research of Sikaras et al. (2022) in which management significantly influences the work psychology of employees using targeted interventions. Fourteen participants reported this particular source of work stress and burnout, mentioning it nineteen times. Indicatively, S36 mentioned "interventions by elected officials who often go beyond their duties to serve their constituents, putting employees in a difficult position" and continued by additionally stating that: "pressure from elected officials to carry out tasks that were often in the limits of breach of duty".

Similar answers were given by S27 reporting "the involvement of elected officials in the exercise of the duties of officials where they interpret the law as they see fit" but even more serious and slickly given references where he describes that psychologically and sexually assaulted by a political boss with insufficient support from the administration". From the answers, as well as the frequency and description of work stress and burnout, it appears that the intervention of elected officials in their official duties worries and at the same time disturbs the municipal employees. Worth mentioning is the fact that eight of the 42 interviewees reported that the working conditions in the Municipality are very satisfactory and the levels of work stress are low to non-existent. However, it is observed that these employees either have very few years of service or were hired for a limited period of time with fixed-term private law contracts, or they have many years of service but their job position has limited responsibilities and responsibilities.

An increased number of employees reported understaffing multiple times and eleven individuals in particular reported understaffing 15 times, which appears to be of great concern to them. Most references refer to "understaffing" (S1, S12, [2 references], S19 [2 references], S21, S27 [2 references], S3, S34, S37, S9), while other references describe it as "understaffing service" (S5 [2 references]). Twelve survey participants mentioned that their high workload creates increased levels of work stress and burnout. All answers refer to "high workload" (S1, S12, S15, S21, S22, S27, S29, S3, S33, S35, S39). Several studies (Martínez-López et al., 2020; Adamopoulos et al., 2023; Linos et al., 2022) have confirmed the effect of increased workload and correspondingly understaffing as important factors enhancing work stress, again confirming the validity of the particular result.

Citizen behavior determines stress and burnout levels for many employees. S17 mentions twice that work stress is caused by the "large visits of the public" and explains that "there is a large attendance of the public as a consequence of which there is a lot of disturbance, nerves and tension". Issues of citizen behavior are confirmed in the studies of Anastasiou and Belios (2020), Hoffman and Dilchert (2012), Galanakis et al. (2020) and Adamopoulos and Syrou (2022), who mentioned that when an employee interacts with a lot of people who have bad behavioral issues, it creates increased work stress and burnout.

Six references from four participants talk about cooperation problems between colleagues. More specifically they refer to "intense conflicts and disagreements with colleagues who exercised authority" as mentioned by S27 and "problems between colleagues" as more simply described by S1. Similar research has been done on the work environment and the relationships created in it, such as Martínez-López et al. (2020), EU-OSHA corporate website (https://osha.europa.eu), Staia and Iordanidis (2014), Anastasiou and Belios (2020) and Chatzigianni et al. (2018) but the specific finding, i.e., the problems created between colleagues, specifies and adds one more factor regarding the main sources of work stress and burnout.

A similar frequency of individuals references were made for the multitude of objects that exist in the Municipality of Xanthi and in the Municipalities in general. Five people characteristically mentioned that there a "continuous influx of new responsibilities" (S24), "the responsibilities has increased a lot" (S41) and more vividly. S5 mentions that there is a "switching of items due to urgent service needs". Four out of three respondents reported not being provided with the right equipment resulting in increased job stress. S27 says that "the equipment provided to them is not what was intended, as a result of which there are several musculoskeletal problems such as cervical syndrome, kyphosis, etc.", S4 talks about "old building infrastructure" and finally S31 refers more generally saying that "without the proper tools". Some studies such as the studies of Martínez-López

et al. (2020) and Chatzigianni et al. (2018) have confirmed the importance for workers of the availability of appropriate means such as PPE and the right equipment.

Frequent work mistakes, the complexity of the laws and the lack of specialization training are also mentioned as sources of work stress. Three people make three references for each of the sources mentioned above. It is typically stated that mistakes, the frequent change of legislation with their complexity and the lack of frequent training equally stress municipal employees. S27 describes how many occupational mistakes occur by describing characteristically that "without the required rest, improper vehicle maintenance and an aging fleet result in many occupational accidents" and S8 expresses a fear that "there will be no accident". In the studies by Berman et al. (2021), Shoman et al. (2021), Linos et al. (2022), Tatsaki et al. (2019), and Dai et al. (2015), it is confirmed that the existence of frequent mistakes and work accidents burdens employees with additional work stress and burnout. Similar references point to mental fatigue, lack of meritocracy, and attribution of failure as sources of job stress and burnout. Work stress and burnout are rarely caused by physical fatigue (S35), the creation of family problems (S39) and disintegrating services (S15). The above findings add additional sources of work stress and burnout to existing research (Chatzigianni et al., 2018; 2020; EU-OSHA, n.d.; Martínez-López et al., Anastasiou & Belios, 2020).

Figure 1 below shows the coding and the extent of the codes regarding the 1st research question, as they emerged from the analysis of the codes in the NVivo program. It can be noticed that the code regarding the management of the organization has the largest area and the next largest codes are the issues of understaffing and the large amount of work. It should be mentioned that the utilization of the Greek language within the figures and data presented in this paper stems from the fundamental nature of the research process. The primary data collection method involved conducting interviews entirely in Greek, thereby necessitating transcription and subsequent analysis of the interviewees' responses in the same language. Given the qualitative nature of the study and the NVivo program employed for data analysis, the coding and thematic analysis were conducted directly in Greek to retain the integrity and nuances of participants' responses. However, acknowledging the limitation for non-Greek speakers in directly accessing the coded data, the authors translated the items in Figure 1, the codes grouped by word similarity are shown. It is characteristically clear that providing the right equipment" is associated with "frequent work errors". In addition, physical and mental fatigue is directly linked to family problems and disintegrating services.

Μεγάλος όγκος εργασίας Legal amount of work Πίεση από προθεσμίες Pressure from deadlines Εργατικά ατυχηματα Work accidents Συχνά εργασιακα λαθη Frequent work mistakes Μη παροχή σωστού εξοπλισμου Lack of proper equipment Έλλειψη εξειδίκευσης-κατάρτισης Lack of specialization training Υποστελέχωση Understanding Συμπεριφορά πολιτώ Citizen behavior Έλλειψη αξιοκρατίας Lack of meritocracy Διοίκηση του οργανισμού Management of the organization Προβλήματα συνεργασίας Cooperation problems Σωματική κούραση Physical fatigue Καταλογισμός αποτυχία. Attribution of failure Ψυχική κούραση Mental fatigue Πολυπλοκότητα Νουα Complexity of laws Υπό διάλυση υπηρεσίες Disbanded services Οικογενειακά προβλήμτα Family problems Πληθώρα αντικειμέ Lots of items

Figure 1. Cluster analysis by word similarity: The first research question

Source: Authors' elaboration.

4.2. The second research question: Discussion of the results

For the second research question, the participants were asked the following questions:

- Reflect and describe your work life before and during the COVID-19 pandemic. What are the differences?
- How do you think the pandemic has contributed to work stress levels (did it increase, decrease or stay the same)?

From the employees' answers to the questions regarding the second research question, the following codes are presented below:

- Need to maintain health;
- Lack of suitable means;
- Isolation and impersonal work life;
- Absence of colleagues due to illness;
- Increased negative feelings (depression);
- Increase in deaths;
- Increase in workload;
- Increase in working hours;
- Special working conditions;
- Social restrictions;
- Masks;
- Non-work from staff;
- Attendance and behavior of people;
- Adaptability problems;
- Teleworking;
- Adherence to protocols;
- Fear of disease:
- Use of unknown digital media;
- The workers were separated.

The COVID-19 pandemic created special conditions in the work environment and in the social life of people. The employees report that the pandemic has caused an increase in their workload. This was reported by nine individuals (S11, S13, S14, S17, S2, S21, S29, S41, S5) with the description either "increased volume/workload" or "increased responsibilities/additional responsibilities". The aforementioned finding confirms the investigations of Martínez-López et al. (2020), EU-OSHA (n.d.), Staia and Iordanidis (2014), Adamopoulos et al. (2022), Adamopoulos et al. (2023) and Sotiropoulou et al. (2023), according to which

pandemic increased work demands and ultimately workload to such an extent that there was an increase in employee burnout. Of interest is the reference of six people including S31, S33, S39, (2 references), S40, and S42 (2 references) who mentioned isolation and impersonal working life due to the restrictions measures taken by the state. They define this isolation as "my work life is impersonal and isolated" (S26, S42), "minimum contact with others" (S33) or "lost personal contact with colleagues and a kind of alienation" (S40). The detachment and solitary approach adopted in professional environments amid the pandemic, as highlighted in the investigations conducted by Sciepura and Linos (2022), Latsou et al. (2022), Sotiropoulou et al. (2023), and Xanthopoulou (2022), have been associated with a rise in work-related stress and burnout among employees. Seven people (S1, S29, S30, S31, S32, S40, S8) mentioned the fear of the unknown coronavirus disease, stating that their fear of the pandemic was great and the unprecedented situations they experienced affected them in their daily work and their social relationships. This finding confirms the study by Adamopoulos et al. (2022) in which the new disease of COVID-19 caused feelings of fear due to ignorance about the new disease and created increased burnout and additional work stress.

Then the same number of people (seven) defined telecommuting as something new, different, brought to the fore by COVID-19 and which contributed to increasing their work stress. S28 mentions that "before the pandemic, it was easier for me to separate work from family life" and S12 emphasizes another disadvantage of telecommuting saying that "we worked more hours from home". Of interest is the expression of the verb "forced" in description of almost everything about telecommuting, a verb used when we want to show that there is a compulsion on someone to do something. Several studies (Sciepura & Linos, 2022; Latsou et al., 2022; Xanthopoulou, 2022; Sotiropoulou et al., 2023) confirm the way teleworking affects employees, especially during the years of the COVID-19 pandemic and have affected them negatively by increasing their work stress and professional burnout.

Four people (S10, S12, S16, S31) consider that the presence and behavior of citizens have changed since the pandemic and created additional work stress for them since, as S16 typically states, "citizens could not manage it because they always want to served, they created problems and considered us responsible for the security measures required by law". S14 and S32 mentioned an increase in negative feelings, stressing that they "significantly increased dissatisfaction, negatively affected personal well-being" (S32) but there was also an "increase in depression due to the sense of permanence of avoidance and social distancing measures for reasons of protection" and "an impasse from the restrictive nature of everyday life and social distance" (S14). The research of Sikaras et al. (2022) emphasizes the strong negative feelings that tend psychological problems created by the pandemic and burden employees with work stress and burnout, an element that was also confirmed in the research carried out in the present study. The findings related to the inadequacy of the tools in general and PPE in particular, the research of Martínez-López et al. (2020), Linos et al. (2022), Meeusen et al. (2023), and Chatzigianni et al. (2018), in which there was a problem regarding the provision of the appropriate means therefore burnout and work stress increased.

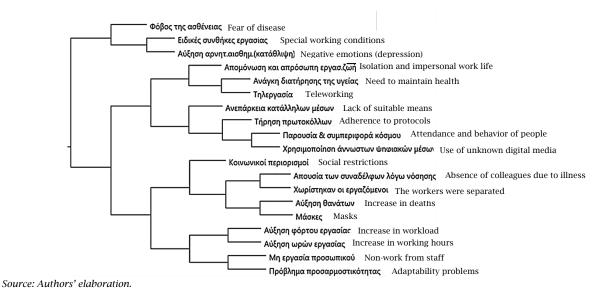
Next, S39 mentions the difficulty that existed during the pandemic period due to "the special conditions" and S37 describes that for the same period, it was difficult due to the fact that "the employees and the world in general were separated". In addition, S32 refers to the social restrictions and explains that it stands out from that period "the prolonged quarantine, the significant restrictions on social life, the restrictions on

movement". The difficulty of learning to handle unfamiliar digital platforms is mentioned by S30, the "protocols that had to be followed" made it difficult for S29 and "adaptability" was for S1 a problem created by the pandemic. Finally, S17 and S21 talk about the additional lack of staff during that period, since due to the pandemic "colleagues who were sick and absent for a long time" (S17) and "we had less staff working every day" (S21). The specific finding regarding the lack of staff verifies research (Sikaras et al., 2022; Martínez-López et al., 2020; Adamopoulos et al., 2023; Linos et al., 2022) where they state that the lack of human resources produces additional work stress and burnout. The parameter that is added to the lack of staff is the cause of the absence of the employees, which concerns the disease from COVID-19.

From all of the above, it can be seen that the period of the pandemic was a difficult period of increased work stress for the employees of the local government. Studies have investigated the impact of COVID-19 on employees' experience of work-related stress (Sikaras et al., 2022; Adamopoulos et al., 2022; Sciepura & Linos, 2022; Latsou et al., 2022; Xanthopoulou, 2022).

Figure 2 presents the codes which are formed into groups based on the similarity of the words that have been used. The results showed a strong correlation between the special working conditions due to the pandemic with the increase of negative emotions as well as the creation of depression problems in some. Teleworking is also linked to the need to maintain the health of employees. In other words, it was considered by many that in order to maintain their health they had to work via telecommuting, which is why there is such a high correlation.

Figure 2. Cluster analysis by word similarity: The second research question



4.3. The third research question: Discussion of results

With reference to the third research question, the employees of the Municipality who participated in the research were asked the following questions:

• As an employee in local government, what solutions would you suggest to reduce the work stress of employees?

- As an employee in local government, what kind of measures would you suggest so as to avoid the consequences of burnout in the future?
- Would you like to comment/suggest/add anything else regarding the issue of work stress and burnout?

The participants responded to the questions, resulting in the emergence of the following codes:

- Feeling of security;
- Staff development;
- Objective assessment;
- Meritocracy:
- Absence of depreciating profession;
- Improving working conditions (working environment);
 - Gymnastics-exercise;
 - Democracy;
 - Personnel training;
 - Specialized staff;
 - Cultivating relationships among colleagues;
 - Mixed labor system;
 - Reduction of bureaucracy;
 - Reduction of workload;
 - Reduction of working hours:
 - Non-interference of elected officials;
 - The presence of a counselor-psychologist;
 - Providing incentives;
 - Staff recruitment (increase);
 - Clarity of responsibilities-objectives;
 - Cooperation of elected officials and officials;
 - Cooperation with other services;
 - Frequent breaks from work;
 - Proper management;
 - Proper division of labor;
 - The existence of an internal audit service;
 - Relaxed hours;
 - Monetary benefits.

Staff recruitment was reported 31 times by 25 employees. This extremely large percentage of participants (59.52%) indicates that "increasing the potential of departments with suitable employees' (S37, S35) is the solution to the work stress and burnout they feel. The present finding confirms the research of Sikaras et al. (2022) according to which the management's options to increase the staff reduces work stress and burnout of employees. The participants refer to proper administration, including "better organization of services" (S15), "proper leadership" (S1), "restructuring of services' functions" (S23), and "better organization" (S30) (2 references). Several studies (Rajesh et al., 2023; Sikaras et al., 2022; Katsiana et al., 2021) have verified the proposals for proper management and correspondingly proper division of responsibilities, as ways of reducing or even solving the problems that create work stress and burnout.

Another suggestion of eleven people with 17 references, in order to achieve the reduction of work stress, is the "continuous/better training of the staff" (S1, S18, S24 (2 references), S25, S26) through seminars and continuous updates in order to "better understand their job requirements" (S27) so that they "return to their tasks effortlessly and smoothly" (S34). The finding for continuous training and specialization of employees is certified in the study of Katsiana et al. (2021), where there is talk of appropriate training in order to deal with and prevent the phenomenon of work stress and burnout.

Cultivating relationships between colleagues was mentioned by the same number of people (11) 14 times emphasizing the importance to people of "communication and cooperation" (S38, S29, S25) between employees and "better attitudes from colleagues" (S32, S38) to create a "positive and collaborative work environment" (S3), "calm working environment" (S4) and to have "respect, cooperation and solidarity among colleagues" (S6). Eight people also pointed out the importance of cooperation with

ten references, specifying this cooperation by characterizing it as "collaboration with other services". The above finding confirms the research of Kourmousi and Alexopoulos (2016), according to which collegiality and strong relationships between colleagues are a protective shield against work stress. Municipal employees attach great importance to the non-interference of elected officials in their work matters. Nine people mentioned 11 times that it would be particularly worrying for them to "remove elected officials from the everyday life of employees" (S15). The intervention of elected officials is a special feature of the Greek local government and it is not mentioned at any point in the bibliographic review since on the one hand the research has not dealt with the local government of Greece and on the other the research of Veromaa et al. (2017), Penttinen et al. (2021) and Asplund et al. (2022) concern local government workers in other countries with different work cultures.

The importance of clarity of responsibilities and objectives was underlined by nine people (S13, S18, S20, S28, S30, S39, S41, S5, S7) through either a specific mandate (S41) or an "updated Internal Service Organization, where with clarity all the responsibilities exercised by the Municipality" (S13). In this way, there will be clear responsibilities for each employee in order to achieve the correct division of responsibilities. Plenty of research (Galanakis et al., 2020; Shoman et al., 2021; Bellali et al., 2020) has also confirmed how important the presence of a counsellor/psychologist in the workplace is in order to provide employees with the appropriate help and support and thus contribute to the reduction of work stress and burnout.

An extensive report (five people with seven references) is made by the employees so that there is a meritocracy in management and improvement of working conditions through "modernization of facilities as well as digital modernization" (S34) and "suitable working environment" (S38, S29, S27). The aforementioned finding is confirmed by the research of Martínez-López et al. (2020) and Linos et al. (2022) in which improving working conditions (providing PPE, and better facilities) reassures workers and reduces symptoms of burnout and work stress. The employees of the Municipality seek objectivity and fairness in the evaluation process, expressing it five times from four people (S15, S19, S41, S7).

It is also suggested that "the skills of each individual should be taken into account for the benefit of the service" (S5) and this is included in the criterion of having qualified staff. Motivation was mentioned by four people explaining that they expect "the reward of high-intensity services" (S19) and "recognition of their effort" (S39). The less workload an employee has, the less work stress they have and this was addressed by S10, S15, S27 and S40. "Frequent and regular breaks" were suggested by three people (S10, S16, S20) and another three people (S10, S16, S20) suggested "cooperation at all levels (among employees and between management and employees)" (S29). Some studies (Shoman et al., 2021; Vella & McIver, 2019; Bellali et al., 2020) have confirmed the need for employees to engage in actions and activities that please them and help reduce accumulated work stress, thus confirming the validity of the present finding-result.

Another way to reduce work stress is to reduce bureaucracy by "completely and immediately transitioning to digital transformation and simplifying all processes by reducing the large amount of bureaucracy" (S40). Other solutions proposed to reduce work-related stress are "democracy" (S20), "reduction in working years" (S23), "fitness-exercise" (S16), "higher monetary rewards" (S11), "flexible working hours" (S10), the "continuous development of staff" (S1), the "feeling of security" (S39), the presence of an "internal audit service", acting as an intermediary or arbitrator, potentially establishing

a committee or designated representative specifically tailored to address the matter in dispute. This mechanism aims to ensure an impartial, prompt, and secure resolution for employees lodging appeals or facing issues (S14) and the particularly pioneering proposal for a "mixed telework system with live work" suggested by S1.

Figure 3 shows the extent of the codes and the coding as they emerged from the NVivo program. The more extensive codes are increasing staff through recruitment, proper division of labor, training employees, and proper management.

Proper division of labor

Proper management

Staff training

Fostering relationships among employees

Coordination with other organizations

Clarity of objectives and responsibilities

Staff recruitment

(increase)

Figure 3. Hierarchy of codes through the NVivo program: The third research question

Source: Authors' elaboration.

Figure 4 displays codes organized in clusters based on word similarity. It reveals a notable correlation between "effective administration" and "task allocation", as well as between the "availability of a psychologist-consultant" and the "presence of an internal audit service". Participants recommend improved administration and a more equitable

distribution of tasks among employees. Ultimately, they suggest a resolution to the work stress issue through collaboration between a consultant or psychologist and a well-staffed internal control service to alleviate symptoms of burnout and work stress.

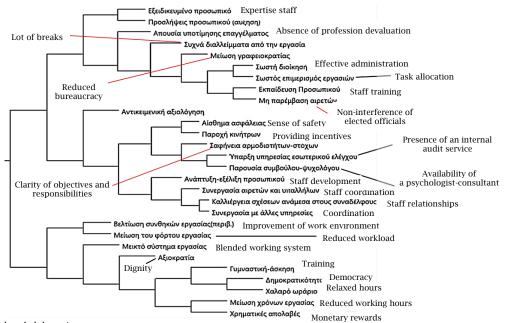


Figure 4. Cluster analysis by word similarity: The third research question

Source: Authors' elaboration.

5. CONCLUSION

The purpose of this thesis is to study occupational stress and burnout among public sector employees, specifically how occupational stress and burnout affect people working in the local government. With reference to the first research question regarding the views on occupational stress and burnout felt by the employees, it emerged that the decisions of the Municipality's Administration in combination with understaffing worry them and disturb them so much that feelings of occupational stress created such an extent that some feel burnout. However, a percentage of 19% of the respondents who had a common denominator in the few years of working was observed, where they expressed the opinion that the conditions in the Municipality of Xanthi are so satisfactory that they do not experience work stress and burnout. The COVID-19 pandemic contributed to an increase in the level of occupational stress of employees due to the increase in workload and responsibilities that have arisen due to the special working conditions. Regarding the proposals and solutions to achieve a reduction of work stress, in the context of the last research question, it was interesting that the employees focused mainly on the recruitment of staff and the continuing education of the employees. Finally, measures such as the presence of a counsellor and/or psychologist seem to particularly relieve the workers in order to list the problems of work stress during their rise and to give immediate suggestions and solutions to deal with them.

The present research employed the qualitative method using the tool of structured interviews and therefore the results produced cannot generalized. Although there was a large sample (42 interviews), which would even allow the use of quantitative research, the inability to generalize the results remains a main characteristic of the qualitative methods. An additional limitation is that the sample taken was from a specific municipality (Municipality of Xanthi) and once again the results cannot be generalized for the entire Local Government. In order to enhance the generalizability of the findings, further research should focus on a broader spectrum of local government bodies, a more extensive encompassing range nationwide. municipalities Lastly, diversifying the research methodology, such as incorporating quantitative methods or adopting a mixed-method approach combining both quantitative and qualitative research, could yield complementary insights.

Overall, the present study is important for future research in order to provide insights into specific challenges within the public sector, including organizational decisions and the impact of external factors such as the COVID-19 pandemic or the current digital reform which also increased the levels of stress and anxiety to public employees. Despite its qualitative nature and focus on a single municipality, the findings serve as a valuable foundation for broader studies across various local government bodies, where the research is still limited.

REFERENCES

- Adamopoulos, I. P., & Syrou, N. F. (2022). Associations and correlations of job stress, job satisfaction and burn out in public health sector. *European Journal of Environment and Public Health*, *6*(2), 1–9, Article em0113. https://doi.org/10.21601/ejeph/12166
- Adamopoulos, I. P., Lamnisos, D., Syrou, N., & Boustras, G. (2022). Public health and work safety pilot study: Inspection of job risks, burn out syndrome and job satisfaction of public health inspectors in Greece. *Safety Science*, *147*, Article 105592. https://doi.org/10.1016/j.ssci.2021.105592
- Adamopoulos, I. P., Syrou, N., Lamnisos, D., & Boustras, G. (2023). Cross-sectional nationwide study in occupational safety & health: Inspection of job risks context, burn out syndrome and job satisfaction of public health inspectors in the period of the COVID-19 pandemic in Greece. *Safety Science*, *158*, 1–10, Article 105960. https://doi.org/10.1016/j.ssci.2022.105960
- Anastasiou, S., & Belios, E. (2020). Effect of age on job satisfaction and emotional exhaustion of primary school teachers in Greece. *European Journal of Investigation in Health, Psychology and Education, 10*(2), 644–655. https://doi.org/10.3390/ejihpe10020047
- Antoniou, A. S., & Koronaiou, P. (2018). Investigating burnout/occupational stress in relation to emotional intelligence and coping strategies in Greek nurses. *Dialogues in Clinical Neuroscience & Mental Health*, 1(1), 38–51. https://doi.org/10.26386/obrela.v1i1.7
- Anyfantis, I. D., & Biska, A. (2018). Musculoskeletal disorders among Greek physiotherapists: Traditional and emerging risk factors. *Safety and Health at Work*, *9*(3), 314–318. https://doi.org/10.1016/j.shaw.2017.09.003
- Asplund, S., Åhlin, J., Åström, S., & Lindgren, B.-M. (2022). Experiences of work-related stress among highly stressed municipal employees in rural northern Sweden. *International Journal of Qualitative Studies on Health and Well-Being*, 17(1), 1–12, Article 2056957. https://doi.org/10.1080/17482631.2022.2056957
- Bazmi, E., Alipour, A., Yasamy, M. T., Kheradmand, A., Salehpour, S., Khodakarim, S., & Soori, H. (2019). Job burnout and related factors among health sector employees. *Iranian Journal of Psychiatry*, 14(4), 309–316. https://doi.org/10.18502/ijps.v14i4.1982
- Bellali, T., Manomenidis, G., Meramveliotaki, E., Minasidou, E., & Galanis, P. (2020). The impact of anxiety and depression in the quality of life and psychological well-being of Greek hematological cancer patients on chemotherapy. *Psychology, Health & Medicine*, *25*(2), 201–213. https://doi.org/10.1080/13548506.2019.1695864
- Berman, E. M., Bowman, J. S., West, J. P., & van Wart, M. R. (2021). Human resource management in public service: Paradoxes, processes, and problems (6th ed.). CQ Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://psycnet.apa.org/doi/10.1191/1478088706qp063oa
- Bryman, A. (1992). Quantitative and qualitative research: Further reflections on their integration. In J. Brannen (Ed.), *Mixing methods: Qualitative and quantitative research* (1st ed., pp. 57–78). Routledge. https://doi.org/10.4324/9781315248813-3

- Burnard, P., Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Analysing and presenting qualitative data. *British Dental Journal*, 204, 429-432. https://doi.org/10.1038/sj.bdj.2008.292
- Chatzigianni, D., Tsounis, A., Markopoulos, N., & Sarafis, P. (2018). Occupational stress experienced by nurses working in a Greek Regional Hospital: A cross-sectional study. *Iranian Journal of Nursing and Midwifery Research*, 23(6), 450–457. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6178576/
- Corrington, A. (2022, May 30). *Structured interviews*. Routledge. https://doi.org/10.4324/9780367198459-reprw210-1 Crawford, W. T., & Detar, W. J. (2023). The relationship between job demands, job resources, employee burnout, and employee engagement in municipal government workers. *Journal of Service Science and Management*, 16(4), 428-447. https://doi.org/10.4236/jssm.2023.164024
- Dai, H., Milkman, K. L., Hofmann, D. A., & Staats, B. R. (2015). The impact of time at work and time off from work on rule compliance: The case of hand hygiene in health care. *Journal of Applied Psychology*, 100(3), 846–862. https://doi.org/10.1037/a0038067
- Dalkin, S., Forster, N., Hodgson, P., Lhussier, M., & Carr, S. M. (2020). Using computer assisted qualitative data analysis software (CAQDAS; NVivo) to assist in the complex process of realist theory generation, refinement and testing. *International Journal of Social Research Methodology*, 24(1), 123–134. https://doi.org/10.1080/13645579.2020.1803528
- EU-OSHA. (n.d.). *Psychokoinonikoi kindynoi kai psychiki ygeia stin ergasia* [Psychosocial risks and mental health at work]. https://osha.europa.eu/el/themes/psychosocial-risks-and-stress
- Galanakis, M., Alexandri, E., Kika, K., Lelekanou, X., Papantonopoulou, M., Stougiannou, D., & Tzani, M. (2020). What is the source of occupational stress and burnout? *Psychology*, 11(5), 647-662. https://doi.org/10.4236/psych.2020.115044
- Gribben, L., & Semple, C. J. (2021). Factors contributing to burnout and work-life balance in adult oncology nursing:

 An integrative review. *European Journal of Oncology Nursing*, 50, Article 101887.

 https://doi.org/10.1016/j.ejon.2020.101887

 Hoffman, B. J., & Dilchert, S. (2012). A review of citizenship and
- Hoffman, B. J., & Dilchert, S. (2012). A review of citizenship and counterproductive behaviors in organizational decision-making. In N. Schmitt (Ed.), *The Oxford handbook of personnel assessment and selection* (pp. 543–569). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199732579.013.0024
- Katsiana, A., Galanakis, M., Saprikis, V., Tsiamitros, D., & Stalikas, A. (2021). Psychological resilience and burnout levels in occupational therapists in Greece. An epidemiological nationwide research. *Psychology*, *12*(1), 86–106. https://doi.org/10.4236/psych.2021.121006
- Kourmousi, N., & Alexopoulos, E. C. (2016). Stress sources and manifestations in a nationwide sample of preprimary, primary, and secondary educators in Greece. *Frontiers in Public Health*, *4*, Article 73. https://doi.org/10.3389/fpubh.2016.00073
- Koutsimani, P., Montgomery, A., & Georganta, K. (2019). The relationship between burnout, depression, and anxiety:

 A systematic review and meta-analysis. *Frontiers in Psychology*, 10, Article 284. https://doi.org/10.3389/fpsyg.2019.00284
- Latsou, D., Bolosi, F.-M., Androutsou, L., & Geitona, M. (2022). Professional quality of life and occupational stress in healthcare professionals during the COVID-19 pandemic in Greece. *Health Services Insights*, 15, Article 117863292210960. https://doi.org/10.1177/11786329221096042
- Leka, S., Griffiths, A., & Cox, T. (2003, May 23). Work organization and stress: Systematic problem approaches for employers, managers and trade union representatives. World Health Organization. https://www.who.int/publications/i/item/9241590475
- Letherby, G., & Zdrodowski, D. (1995). "Dear researcher": The use of correspondence as a method within feminist qualitative research. *Gender & Society*, *9*(5), 576–593. https://doi.org/10.1177/089124395009005005
- Li, Y., & Zhang, S. (2022). Applied research methods in urban and regional planning. Springer. https://doi.org/10.1007/978-3-030-93574-0
- Linos, E., Ruffini, K., & Wilcoxen, S. (2022). Reducing burnout and resignations among frontline workers: A field experiment. *Journal of Public Administration Research and Theory*, 32(3), 473–488. https://doi.org/10.1093/jopart/muab042
- Marazziti, D., Avella, M. T., Mucci, N., Della Vecchia, A., Ivaldi, T., Palermo, S., & Mucci, F. (2020). Impact of economic crisis on mental health: A 10-year challenge. CNS Spectrums, 26(1), 7-13. https://doi.org/10.1017/s1092852920000140
- Martínez-López, J. Á., Lázaro-Pérez, C., Gómez-Galán, J., & Fernández-Martínez, M. del M. (2020). Psychological impact of COVID-19 emergency on health professionals: Burnout incidence at the most critical period in Spain. *Journal of Clinical Medicine*, *9*(9), Article 3029. https://doi.org/10.3390/jcm9093029
- Maslach, C. (1982). Burnout: The cost of caring. Prentice Hall.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498–512. https://doi.org/10.1037/0021-9010.93.3.498
- Meeusen, V., Gatt, S. P., Barach, P., & van Zundert, A. (2023). Occupational well-being, resilience, burnout, and job satisfaction of surgical teams. In J. A. Sanchez, R. S. Higgins, & P. S. Kent (Eds.), *Handbook of perioperative and procedural patient safety* (pp. 205–229). Elsevier.
- Montazer, S., Pineault, L., Brumley, K. M., Maguire, K., & Baltes, B. (2024). Social change in the turbulent times of the COVID-19 pandemic: Impacts of work-related demands on work-to-family conflict, mastery, and psychological distress. *Society and Mental Health*. https://doi.org/10.1177/21568693231218256
- Muthén, L. K., & Muthén, B. O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling: A Multidisciplinary Journal*, *9*(4), 599–620. https://doi.org/10.1207/s15328007sem0904_8
- Niven, A. S., & Sessler, C. N. (2022). Supporting professionals in critical care medicine: Burnout, resiliency, and system-level change. *Clinics in Chest Medicine*, *43*(3), 563–577. https://doi.org/10.1016/j.ccm.2022.05.010
- Ntantana, A., Matamis, D., Savvidou, S., Giannakou, M., Gouva, M., Nakos, G., & Koulouras, V. (2017). Burnout and job satisfaction of intensive care personnel and the relationship with personality and religious traits: An observational, multicenter, cross-sectional study. *Intensive and Critical Care Nursing*, 41, 11–17. https://doi.org/10.1016/j.iccn.2017.02.009

- Pace, D. S. (2021). Probability and non-probability sampling An entry point for undergraduate researchers. *International Journal of Quantitative and Qualitative Research Methods*, 9(2), 1–15. https://www.eajournals.org/wp-content/uploads/Probability-and-Non-Probability-Sampling-an-entry-point-for-undergraduate-researchers.pdf
- Penttinen, M. A., Virtanen, J., Laaksonen, M., Erkkola, M., Vepsäläinen, H., Kautiainen, H., & Korhonen, P. (2021). The association between healthy diet and burnout symptoms among Finnish municipal employees. *Nutrients*, *13*(7), Article 2393. https://doi.org/10.3390/nu13072393
- Rachiotis, G., Kourousis, C., Kamilaraki, M., Symvoulakis, E. K., Dounias, G., & Hadjichristodoulou, C. (2014). Medical supplies shortages and burnout among Greek health care workers during economic crisis: A pilot study. *International Journal of Medical Sciences*, 11(5), 442–447. https://doi.org/10.7150/ijms.7933
- Rajesh, J. I., Prikshat, V., Kirk, S., Saeed, M. M., Patel, P., & Sheheryar Khan, M. M. (2023). Public service leadership: Follower interpersonal communication satisfaction in transformational leadership and growth satisfaction, job stress and burnout. *Journal of Asia Business Studies*, 17(6), 1183–1204. https://doi.org/10.1108/jabs-09-2022-0310
- Razu, S. R., Yasmin, T., Arif, T. B., Islam, M. S., Islam, S. M. S., Gesesew, H. A., & Ward, P. (2021). Challenges faced by healthcare professionals during the COVID-19 pandemic: A qualitative inquiry from Bangladesh. *Frontiers in public health*, *9*, Article 647315. https://doi.org/10.3389/fpubh.2021.647315
- Roberts, F., Teague, B., Lee, J., & Rushworth, I. (2021). The prevalence of burnout and secondary traumatic stress in professionals and volunteers working with forcibly displaced people: A systematic review and two meta-analyses. *Journal of Traumatic Stress*, 34(4), 773–785. https://doi.org/10.1002/jts.22659
- Sager, J. K., & Wilson, P. H. (1995). Clarification of the meaning of job stress in the context of sales force research. *Journal of Personal Selling & Sales Management*, 15(3), 51-63. https://www.tandfonline.com/doi/abs/10.1080/08853134.1995.10754028
- Saraswati, E., & Ariwibowo, R. (2023). Revisiting local government auditors' burnout upon its stress dimensions. International Journal of Professional Business Review, 8(11), Article e03820. https://doi.org/10.26668/businessreview/2023.v8i11.3820
- Schuster, C., Weitzman, L., Sass Mikkelsen, K., Meyer-Sahling, J., Bersch, K., Fukuyama, F., Paskov, P., Rogger, D., Mistree, D., & Kay, K. (2020). Responding to COVID-19 through surveys of public servants. *Public Administration Review*, 80(5), 792–796. https://doi.org/10.1111/puar.13246
- Sciepura, B., & Linos, E. (2022). When perceptions of public service harms the public servant: Predictors of burnout and compassion fatigue in government. *Review of Public Personnel Administration*, 44(1), 116–138. https://doi.org/10.1177/0734371x221081508
- Shoman, Y., El May, E., Marca, S. C., Wild, P., Bianchi, R., Bugge, M. D., Caglayan, C., Cheptea, D., Gnesi, M., Godderis, L., Kiran, S., McElvenny, D. M., Mediouni, Z., Mehlum, I. S., Mijakoski, D., Minov, J., van der Molen, H. F., Nena, E., Otelea, M., & Guseva Canu, I. (2021). Predictors of occupational burnout: A systematic review. *International Journal of Environmental Research and Public Health*, 18(17), Article 9188. https://doi.org/10.3390/ijerph18179188
- Sikaras, C., Ilias, I., Tselebis, A., Pachi, A., Zyga, S., Tsironi, M., Gil, A. P. R., & Panagiotou, A. (2022). Nursing staff fatigue and burnout during the COVID-19 pandemic in Greece. *AIMS Public Health*, *9*(1), 94–105. https://doi.org/10.3934/publichealth.2022008
- Sotiropoulou, K., Patitsa, C., Giannakouli, V., Galanakis, M., Koundourou, C., & Tsitsas, G. (2023). Self-compassion as a key factor of subjective happiness and psychological well-being among Greek adults during COVID-19 lockdowns. *International Journal of Environmental Research and Public Health*, *20*(15), Article 6464. https://doi.org/10.3390/ijerph20156464
- Staia, D., & Iordanidis, G. (2014). Professional stress and professional burnout of teachers in the era of economic crisis. *Scientific Yearbook of the Pedagogical Department of Kindergarten Teachers, University of Ioannina,* 7, 56–82. https://doi.org/10.12681/jret.855
- Suwiknyo, P. (2022). Analysis of the influence of aptitude and attitude on burnout rates and work performance (literature review of human resource management). *Dinasti International Journal of Digital Business Management*, 3(4), 631–643. https://dinastipub.org/DIJDBM/article/view/1264
- Taherdoost, H. (2022). How to write an effective discussion in a research paper; a guide to writing the discussion section of a research article. *Open Access Journal of Addiction and Psychology*, 5(2). https://doi.org/10.33552/oajap.2022.05.000609
- Tatsaki, E., Sgourou, E., Katsakiori, P., Konsta, I., & Gerasimou, S. (2019). The impact of occupational accidents and gross domestic product on the sanctions imposed by the Greek Osh inspectorate. *Safety Science*, 115, 349–352. https://doi.org/10.1016/j.ssci.2019.02.032
- Tsigilis, N., Zachopoulou, E., & Grammatikopoulos, V. (2006). Job satisfaction and burnout among Greek early educators: A comparison between public and private sector employees. *Educational Research and Reviews*, 1(8), 256–261. https://www.researchgate.net/publication/235345489_Job_satisfaction_and_burnout_among_Greek_early_educators_A_comparison_between_public_and_private_sector_employees
- Vella, E., & McIver, S. (2019). Reducing stress and burnout in the public-sector work environment: A mindfulness meditation pilot study. *Health Promotion Journal of Australia, 30*(2), 219–227. https://doi.org/10.1002/hpja.192
- Veromaa, V., Kautiainen, H., & Korhonen, P. E. (2017). Physical and mental health factors associated with work engagement among Finnish female municipal employees: A cross-sectional study. *BMJ Open*, 7(10), Article e017303. https://doi.org/10.1136/bmjopen-2017-017303
- Xanthopoulou, P. (2020). From e-government to public value creation. *International Journal of Science and Research (IJSR)*, *9*(3), 927–933. https://www.ijsr.net/archive/v9i3/SR20316155905.pdf
- Xanthopoulou, P. (2022). Blockchain and the digital transformation of the public sector: The Greek experience. *Technium Social Sciences Journal*, *32*(1), 558–570. https://doi.org/10.47577/tssj.v32i1.6702
- Xanthopoulou, P., & Sahinidis, A. (2022). The impact of organizational culture on business innovativeness. *Proceedings of the 17th European Conference on Innovation and Entrepreneurship, 17*(1), 608–616. https://doi.org/10.34190/ecie.17.1.405