# The importance of **shift work**: The **hospitality sector**

DORA MARTINS \* [doramartins@iscap.ipp.pt]

SOFIA AMARO \*\* [sofiaamaro1823@gmail.com]

SUSANA SILVA \*\*\* [susanasilva@esht.ipp.pt]

Abstract | This study explores the importance of shift work in the organizational context of the hospitality sector. To answer its four research objectives: (1) to identify the degree of satisfaction with the shift work regime; (2) to characterize individual motivations for doing shift work; (3) to understand the impact of shift work on the worker's physical, mental, social well-being and family environment and (4) to identify the willingness for choosing shift work a survey was developed, published online and it gathered the answers of 153 shift workers in the hospitality sector. The results indicate that the main motivation to work in shifts is related to the requirement of the function itself. The degree of satisfaction of workers doing shift work tends to decrease when they evaluate their satisfaction with the balance between work life and the other dimensions - personal, family, and social life. Most respondents say that if they could choose, they would not work in shifts, considering its negative effects on their physical and mental well-being, as well as on their family and social well-being. From the results obtained, we will contribute to the literature on shift work by showing the need for greater organizational support, be it at the level of physical conditions of work or the level of benefits promoting social well-being for this category of workers.

Keywords | Shift work, job satisfaction, labor flexibility, work-family conflict, hospitality sector

<sup>\*</sup> PhD Program in Business Sciences, focused on Organisation and Human Resources from School of Economics and Management of University of Porto. Full professor at Porto Accounting and Business School, Polytechnic Institute of Porto (Portugal) and research member of GOVCOPP, from University of Aveiro and CEOS.PP (Polytechnic of Porto)

\*\* Master Degree in Hotel Management

<sup>\*\*\*</sup> PhD Program in Psychology from University of Minho. Full professor at School of Hospitality and Tourism, Polytechnic Institute of Porto (Portugal) and research member of CEOS.PP and CITUR (Polytechnic of Porto)

## 1. Introduction

The hospitality sector is characterized by high labor intensity, resulting from services associated with sector requirements (Harjanti & Todani, 2019), involving complex procedures, and intense interpersonal relationships in various daily activities (Yirik, Oren & Ekici, 2015; Varum, Madaleno, Robaina & Dias, 2017). The demanding nature of hospitality work makes it necessary for workers to be prepared to provide quality services to their customers, taking into account their differing needs (Cabral & Pereira, 2021; Teixeira, 2019). Harjanti and Todani (2019) have recently shown that workers in this sector, when satisfied with their work, tend to be more cooperative, perform better, and have minimal rates of work error. In line with this assumption, hospitality workers are expected to demonstrate certain specific qualities for the service they develop. Furthermore, they play a key role in achieving the organizations' goals (Yirik et al, 2015) and, as part of their system of values, they have an orientation for customer satisfaction, and providing a quality and innovative service, to exceed customer expectations (Kao, Tsaur & Wu, 2016).

The increasing demands of the economic market in recent decades has led to the need of reorganizing labor, and shift work is becoming more common (Ishitani, 2010; Khan, Duan, Yao & Hou, 2018; Varum et al., 2017), especially in industries whose operation rests on continuous labor, that is, 24 hours per day (Moon, Lee, Lee, Lee & Kim, 2015), as is the case with the hospitality sector. However, several issues have been raised concerning the health and quality of life of workers who perform their professional activities in this work regime. In particular, performing work on continuous irregular shifts causes serious health problems, including sleep disorders, psychiatric disorders, cancer, and metabolic disorders (Khan et al., 2018; Perrucci et al., 2007; Wedderburn, 2000). These health problems arise due to the disruption of the circadian clock system, which is associated with genetic changes and related to disorders such as depression, bipolar disorder, sleep syndromes, breast, and colon cancer (Khan et al., 2018). Shift work has also been referred to by several authors (e.g. Bhadra, Thakkar, Das & Bhadra, 2017; Jones, Huang, Ptáček & Fu, 2013; Silva & Silva, 2015; Wedderburn, 2000) as an impact factor on workers' well-being. Wedderburn (2000) argues that a shift worker tends to suffer from sleep disturbance and may become irritable and moody. When, on the contrary, he/she has a healthy family and social life, the mental well-being of the worker tends to improve. Other authors (e.g. Deery & Jago, 2015; Sirgy & Lee, 2018; Williams, 2008) highlight the difficulty shift-workers have in reconciling work with their personal, family, and social life. According to Sirgy & Lee (2018), workers hardly reach a work-life balance, eventually dedicating themselves more to a specific domain of their life, affecting their satisfaction and performance in the other domains.

Given that the work regime has several implications for the physical and mental health, individual, social, and family well-being of the worker, the relevance of the proposed study may become more apparent. This research attempts to answer four main research objectives: (1) to identify the degree of satisfaction with the shift work regime; (2) to characterize individual motivations for doing shift work; (3) to understand the impact of shift work on the worker's physical, mental, social wellbeing and family environment and (4) to identify the willingness for choosing shift work.

The article is structured as follows: first, we present a literature review on shift work, with an emphasis on the tourism sector. Second, we discuss the literature related to the motivations for choosing shift work and we explore the main effects on workers' health and their non-working life. Next, we explain the methodology used in the empirical study and we briefly characterize the context and the study participants, followed by the presentation of our main findings. In the conclusion, we identify the study's main contributions as well as its limitations and provide suggestions for future research.

#### 2. Literature Review

Shift work is more of a necessity than a choice, due to the large number of industries requiring 24hour customer service (Jansen et al., 2004; Williams, 2008; Unsal-Akbıyık & Zeytinoglu, 2018). Within this group of industries, the hospitality sector (Esen, Hatipoğlu, Cihan & Fiğlali, 2019; Unsal-Akbıyık & Zeytinoglu, 2018) or certain tourism and restaurant businesses, including bars, cafes and restaurants present uncertain shift work (Plyushteva, 2019; Zhao, Ghiselli, Law & Ma 2016). In particular, restaurant businesses tend to hire more part-time employees in short shift schedules to increase labor flexibility and reduce costs (Kim & Jang, 2020).

According to the Labor Code (Law 7/2009, Article 220), "shift work is considered to be any teamwork organization whose workers occupy successively the same jobs, at a given rate and may perform work at different times, within a given period of days or weeks". This definition is in line with the literature (e.g. Costa, 2016; Folkard & Tucker, 2003; Knutsson, 2004; Williams, 2008), which indicates that the shift work regime covers 24 hours per day, with different workers on different shifts. There are several shift schedules, which can be performed on rotating or alternating shifts (Moreno, Fischer & Rotenberg, 2003). The rotation of shifts (Costa, 2016) can be fast (between one and three days); intermediate (between four and six days); slow (at least seven days), or zero (for fixed shifts). Compressed week work is a type of schedule that allows shift workers to work longer hours per day (Wadsworth & Facer, 2016) but work fewer days per week compared to working five hours every day of the week.

Frequently associated with long, unpredictable shift hours is the tourism industry, including restaurants and hospitality sectors, which represent a high percentage of the total workforce in different parts of the world. For instance, the restaurant industry typically employs a diverse workforce. In the United States (U.S.), this industry accounts for nearly 10% of the total U.S workforce and expects to add another 1.3 million jobs by 2023 (Durrani & Rajagopal, 2016). Across Europe, these industries in general (tourism, hospitality, and catering) have a high economic impact. In Portugal, for instance, it has got a 19.8% stake in the national economy, in Spain 14.6%, in Greece 21.2% and its highest impact is felt on the Croatian economy, with a 25.1% stake (World Travel and Tourism Council, 2020). Furthermore, according to Plyushteva (2019), tourism has greater importance to Brussels' economy, with 4.3 nights per resident spent in tourist accommodation in 2016 compared to Sofia's 1.4. Tourism and hospitality have greater relative importance for employment in Sofia, with an estimated one-third of jobs found in the trade, transport, hotels, and catering sectors.

The underlying motivations for choosing shift work may vary. Workers' motivations may be related to convenience or need, that is, linked to personal, family, or financial issues (Ihlstrom, Kecklund & Anund, 2017; McMenamin, 2007; Pieh et al., 2018), since in addition to receiving extra pay and financial benefits, they have the possibility of finding a second job, because they may have more days off when doing shift work (Wedderburn, 2000). Especially in the night work regime, the financial reasons are fundamental to the personal satisfaction felt by the employees, as they have the possibility of increasing their income by pursuing a second job or doing overtime (Bao & Nizam, 2015; Prata & Silva, 2013; Silveira et al., 2016). Prata and Silva (2013) concluded that workers who perform rotating shifts stated that they prefer a traditional working time, but only if they get the same salary as when they are doing shift work.

At a personal, social, and family level, shift work has many advantages (Shen & Dicker, 2008). Among the main advantages is the flexibility of hours, days off during the week, the absence of fixed routines, the possibility of workers having free time for themselves, avoiding "rush hour" traffic between home and work, flexibility in swapping shifts, avoiding large crowds when shopping, enjoying entertainment activities and the possibility of linking time off (Carneiro & Silva, 2015; Prata & Silva, 2013; Wedderburn, 2000). Shift work allows employees to use their free time to solve problems that can only be addressed during office hours (Carneiro & Silva, 2015).

In turn, the opportunity to get extra days off as a result of working in shifts allows workers more time to be with their family, particularly more childcare when they are younger (Marshall, 1998; Shen & Dicker, 2008). Shift work also enables workers to provide care for older family members (Marshall, 1998), accompanying and caring for them during the hours when other family members are working in a traditional work regime. When work is done on the night shift, personal motivations may be linked to the existence of free time during the day to devote to studies or leisure activities. The worker also enjoys a calmer, more relaxed, and quieter environment during the night shift (Silveira et al., 2016). In particular, fixed night shift workers indicate that they can carry out good planning of social activities during their rest time and days off due to their fixed shift schedule (Williams, 2008).

Although the advantages of shift work are diverse, some literature (e.g. Esen et al., 2019; Sharma, 2020; Wedderburn, 2000) underlines that shift work causes an imbalance between the worker and the rhythms considered normal by society in family life, or by the biological desynchronization that occurs as a result of shift work. Shift work tends to affect the workers' health (Jones et al., 2013), welfare (Bhadra et al., 2017), and their professional performance (Knutsson, 2004). The misalignment of circadian rhythms of bodily functions is responsible for shift lag syndrome, and this turn may cause fatigue, drowsiness, insomnia, digestive problems, irritability, affecting the physical and mental health of the worker (Bhadra et al., 2017; Knutsson, 2004). Other authors (e.g. Costa, 2016; Moon et al., 2015; Wedderburn, 2000) showed that there are psychological implications, the possibility for sleep disorders and depression being more prominent in fixed night shift workers. In turn, professional performance may be poorer (Costa, 2016; Silva & Silva, 2015). In line with this argument, Wedderburn (2000) indicates that the sleep problems that occur when performing night work are related to the well-being of the worker and that he may become irritable and moody. On the contrary, having a healthy family and social life allows the worker to keep more easily mentally well (Perruci et al., 2007; Shen & Dicker, 2008; Kim, Kim, Lee & Choi, 2016; Pieh et al., 2018).

These impacts on the physical and mental health of the worker also are common in the restaurant and some businesses in the tourism sector. On the one hand, the high seasonality and the consequent use of partial hiring, especially in catering and some tourism businesses to generate gains in competitiveness, have generated less job security especially for the restaurant and catering workers, accentuating the difficulties of reconciling work-life balance and employee well-being (Díaz-Carrión; Navajas-Romero & Casas-Rosal, 2020; Sharma, 2020). On the other hand, past studies suggest that, in the tourism, hospitality, and catering sectors, job stress, depression, and burnout are some of the aspects affecting the employee's well-being that result in employee turnover (Saah & Amu, 2020; Sharma, 2020; Sánchez-Medina; Arteaga-Ortiz; Naumchik & Pellejero, 2020).

In the tourism industry, especially in catering, work is widely regarded as an entry-level job that requires few skills and little education (Kim & Jang, 2020). Furthermore, the catering and hospitality sectors are known to have high turnover, labor dissatisfaction, and stress among employees (Durrani & Rajagopal, 2016; Kim & Jang, 2020; Sharma, 2020), which limits employees' access to further training, career development and job security, as well as long working hours, low job security and the scarcity of promotional possibilities along with the association of shift work and night work with more unsocial working hours and seasonality (Díaz-Carrión et al., 2020; Zhao et al., 2016). Furthermore, employees who work in this industry experience difficulties maintaining a work-life balance and a healthy lifestyle that prevent stress and do not result in low levels of job satisfaction as referred by Díaz-Carrión et al. (2020), and Saah and Amu (2020).

Achieving a better balance between family and working life is one of the top priorities for shift workers (Itani & Kaneita, 2016; Ihlstrom, Kecklund, & Anund, 2017; Kim et al., 2016; Pieh et al., 2018). In this regard, diverse literature (eg Kim et al., 2016; Perrucci et al., 2007; Silva & Silva, 2015; Williams, 2008) suggests that shift work is difficult to reconcile with family life, especially for workers who have underage children. In particular, Magnini (2009) stated that due to the nature of work in the hospitality sector, there are conflicts in terms of the combination of family and professional life, which results in a higher level of work absenteeism and turnover intention, decreased quality in job performance and job dissatisfaction. Shen & Dicker (2008) report that shift work has a negative impact on workers' marriage and affective relationships, making it more difficult to maintain healthy relationships. For workers, the benefit of having more days off is not sufficient to counteract the negative impact that working antisocial hours may have on family and/or marital relationships.

In line with this argument, Perrucci et al. (2007) indicate that shift workers are more likely to experience difficulties in their family life, marital quality of life, and a higher likelihood of divorce compared to those working traditional hours.

The difficulties experienced by the workers in their social life can make them organize their daily routines in an unhealthy way (impacting meal times and the duration of sleep) to prioritize their social relationships (Shen & Dicker; Wedderburn, 2000). The literature (e.g. Costa, 2016; Prata & Silva, 2013) suggests that night and afternoon shift work have the most negative impact on workers' social relationships. Prata and Silva (2013) tried to support that statement with the fact that the morning shift most closely resembles the traditional work shift, freeing late-night and evening workers to reconcile work with social and/or family life.

Motivation to do shift work is an essential factor for job satisfaction. In hotel organizations where workers consider themselves satisfied with their working arrangements, the quality of service and competitiveness tends to be higher (Borralha et al., 2016; Cruz, López-Guzmán & Cañizares, 2014). However, Demerouti, Geurts, Bakker and Euwema(2004) show that workers who perform fixed shifts, whether in the morning, afternoon, evening, or over the weekend, have a higher level of job satisfaction, job effectiveness, and lower turnover intentions compared to workers performing rotating shifts.

This is a concern also in the catering sector, especially in businesses linked to bars, cafes, clubs, and restaurants that predominantly work long night hours. The study conducted by Plyushteva (2019), in Brussels and Sofia, suggests that there are almost no public transports between 11 pm and 5 am in both European capitals, which brings greater travel challenges for those working these hours. As a consequence, night workers who need to travel on public transport may be confronted with higher transport costs, such as cab fares, since departure times from the workplace are uncertain. In addition to this, Plyushteva (2019) also stresses that, emotionally, traveling on public transportation at night can be a more tense experience given the feeling of insecurity caused by night travel. This feeling tends to be greater among women because they feel more insecure and vulnerable (Plyushteva, 2019).

Previous empirical studies (e.g. Plyushteva, 2019; Saah & Amu, 2020; Sharma, 2020; Zhao et al., 2016) have indicated that several hotels and restaurants can promote specific job characteristics, such as "anti-social" working hours and seasonality, induce dissatisfaction and stress among employees. Furthermore, the circumstances under which employees work can be less than familyfriendly in that their working schedules often include long hours, split shifts, holidays/weekends, overtime, and irregular schedules leading to a higher level of employee turnover in this industry (Sharma, 2020). Accordingly, some recent literature (e.g., Díaz-Carrión et al., 2020; Sharma, 2020), underlines the importance of researchers addressing the relevance of HR in managing the impact of shift work on health, work, and family life, especially in the Hospitality sector with 24/7 work environment.

To have greater satisfaction in performing shift work, Silva and Silva (2015) suggest that hotel managers should define weekly working hours, together with workers. Thus, organizations can meet the needs of workers, who will have greater satisfaction defining their work scale. This way, the improvement of communication between workers and managers is also developed, creating in workers the perception of greater support from the organization, and it may also be a factor directly linked to job satisfaction (Silva & Silva, 2015).

# 3. Methodology

This is a cross-sectional, descriptive, and correlational study that aims at answering the research question "What are the main motivations of hospitality sector workers for doing shifts?". In this sense, the present study aims to understand the satisfaction of hospitality sector workers with the shift work regime. In particular, to identify the reasons for choosing shift work; identify the effects of shift workers and identify the willingness to do shift work.

Based on the literature review, the following hypotheses were formulated:

- 1. Financial compensation is the predominant motivation for male workers to choose shift work, in the hospitality sector;
- 2. Financial compensation is the predominant motivation for rotating shift workers in the hospitality sector;
- 3. Financial compensation is the predominant motivation for married workers to choose shift work, in the hospitality sector;
- 4. The possibility for better management of family support is the predominant motivation for female workers to do shift work, in the hospitality sector;
- 5. Better management of family support is the predominant motivation for married workers to do shift work, in the hotel sector;
- 6. Workers in the morning shift show greater satisfaction with their personal and family life balance;
- 7. Single workers are the ones who show greater satisfaction with their personal and family life balance;
- 8. Female workers are the ones who show greater satisfaction with their personal and family life balance;
- 9. The rotating shift is the type of shift favored by male workers in the hospitality sector;
- 10. The rotating shift is the type of shift favored by married workers in the hospitality sector.

#### Instrument

In this study, we used the survey "Shift work: The impact on the personal and professional life balance" (Martins, Pinto & Silva, 2018). This survey consists of three sections. The first section, with the sociodemographic characterization, has 12 questions that aim to characterize the sociodemographic aspects of the sample. The second section, comprised of 23 questions, aims to assess "satisfaction with the shift work regime" using a Likert scale (1 - "very dissatisfied" to 4 - "very satisfied"). The third section, composed of nine questions, aims to evaluate the "motivations for doing shift work", having dichotomous and ordinal questions.

# Sample

The convenience sample was comprised of 153 participants (90 of which were female, corresponding to 59% and 41% male). Regarding marital status, most participants were single (n=81, 53%)One hundred participants (65%) had higher academic qualifications, and 109 (71%) performed operational functions. Concerning the type of contract, 63 (41%) had a fixed-term contract and 66 (43%) had a permanent contract. Regarding shift work, 105 (69%) people reported having a rotating shift, and 130 (85%) worked in the morning shift, 108 (71%) in the afternoon shift, 42 (27%) in the night shift, and 84 (55%) on the weekend shift. Most respondents (n=84, 55%) have been on shift work for more than 2 years. Regarding their salary, 101 respondents (66%) reported earning between 600 € and 1000 € per month.

#### **Procedure**

Data was made available and collected between February and April 2019. The survey was disseminated through the LinkedIn social network as well as through the researchers' professional and institutional contacts network to allow further dissemination of the study. Following distribution and data collection, a database was constructed for statistical analysis of information using the IBM Statistical Package for Social Sciences software, version 25.0. Regarding data analysis, we started with descriptive data analysis, calculating central tendency measures and dispersion measures for the different variables. Subsequently, the hypotheses test was performed, with a 95% confidence interval. For hypothesis 6, the Kruskal-Wallis test was performed, and chi-square tests were used to test the other hypotheses.

# 4. Results

Regarding the satisfaction of hospitality sector employees with shift work, we found that about one third of the participants in our study were unhappy with shift work (n=55, 36%), with the level of professional achievement (n=49, 32%), social life (n=45, 29%), family life (n=47, 31%), physical well-being (n=59, 39%), mental wellbeing (n=54, 35%). Most participants stated that they are very satisfied with their level of concentration on professional performance (n=125, 82%), their ability to work in a team (n=142, 93%), their ability to make decisions (n=142, 93%), interpersonal relationship skills (n=145, 95%), personal life (n=116, 76%), with the time available for meals, (n=80, 53%), with the quality of meals (n=80, 53%), time available for sleep (n=78, 51%). In turn, most of our participants are dissatisfied with the amount of time available for various tasks and activities, namely: family activities (n=101, 66%), household activities (n=94, 61%) , family life activities (n=104, 68%), social activities (n=101, 66%), resting (n=81, 53%), individual leisure activities (n=97, 63%), health care (n=81, 53%), and the time available to perform career development activities (n=101, 66%).

Concerning the motivation of workers to work in shifts, of the 12 reasons presented, the only reason widely mentioned by the participants as a mo-

tivation to work in the shift was the one stating it was a job requirement (n=136, 89%).

The most mentioned effects of shift work reported by our study participants were: having difficulty sleeping (n=80, 53%), having lower quality in the marital relationship (n=82, 54%), having lower quality in the relationship with other family members (n=94, 61%), and to having lower quality in the relationship with friends (n=111, 73%).

Regarding the willingness to do shift work, 121 respondents (79%) would not choose to do it if allowed to choose. However, one in five participants (n= 31, 20%) reported that a lack of balance in their personal and professional lives is the main reason for not wanting to work shifts.

Regarding the hypothesis test, we found that there is no relationship between the financial compensation and the employee's gender (H=1,X2=2,503, p=0.114), the type of rotating shift (H=2, X2=2,578, p=0.108), and the marital status of the workers shift work (H=3, X2=1,341, p=0.511). Additionally, we intend to investigate the relationship between family management and the gender of shift workers, and those that are not in a relationship (H=4, X2=0,495, p=0.482). However, when we test the relationship between family support management and shift workers' marital status, this is statistically significant (H=5, p=0.012), with single shift workers reporting the most support in family management. On the other hand, there is no relationship between performing the morning shift and satisfaction with the balance between personal and family life (H=6, p=0.356), nor is there a relationship between satisfaction with the balance of personal and family life and gender (H=8, X2=6.873, p=0.143). However, single shift workers are those that report greater satisfaction with their personal and family life balance (H=7, p=0.000).

Regarding the rotating shift, we found statistically significant differences for males (H=9, X2=4,873, p=0.027) and married men (H=10, p=0.002).

#### 5. Discussion

Although previous studies (e.g. Wedderburn, 2000) found that in the hospitality sector, financial compensation is the main motivation for doing shift work, these results have not been confirmed by the sample of this study. On the contrary, it seems that we are dealing with a group of hospitality sector workers who value more the fact that they perform a job that satisfies them professionally and not just the interest in earning a higher salary. One of the explanations for this result may be the fact that the hospitality sector prefers shift work, making this type of work schedule increasingly synonymous with normality in this sector.

Married workers seemed to show other motivations for working in this work regime, namely the possibility of having a better balance between work and their personal, family, and social life, as was determined in the study by Shen and Dicker (2008). If this possibility is confirmed, shift work seems to be a decision of convenience rather than necessity.

Married workers tend to be less motivated to work in shifts. One possible argument may be related to the greater difficulty of reconciling schedules between the elements of the couple. This evidence supports the assumption that shift work may have a negative impact on workers' marital relationships (Shen & Dicker, 2008; Williams, 2008), as it is more difficult to maintain these relationships healthv.

Although literature (e.g. Demerouti et al., 2004) suggests that workers prefer fixed shifts, the results show a preference for rotating shifts. One of the reasons that may explain these results may be the willingness of workers to have more freedom to balance their professional and non-professional lives, especially if they cannot choose the preferred shift to perform the desired function.

## 6. Conclusion

In this article, we examined the importance of shift work in the hospitality sector. Overall, we confirmed that the greater satisfaction of shift workers is related to job-related conditions and personal quality of life. The lowest satisfaction is linked to the level of professional achievement, family and social quality of life as well as physical and mental well-being. The motivation for deciding to work in shifts relates to the fact that it is a requirement of the job they want to perform. However, if the same function could be performed in the traditional work regime, respondents' motivation would tend to change, considering the effects of shift work on family and social life quality as well as workers' health.

This research has shown that the subject needs to be analysed more systematically, which may justify further studies related to the reasons for choosing shift work, while also emphasizing that it is desirable to develop research to explore the factors which may provide greater satisfaction with shift work.

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## References

Bao, C. & Nizam, I. (2015). The impact of motivation on employee performance in the electronics industry in China. International Journal of Accounting & Business Management, 3(2), 29-45. 10.24924/ijabm/2015.11/v3.iss2/29.45

- Borralha, S., Jesus, S. N., Pinto, P. & Viseu, J. (2016). Job satisfaction in hotel employees: A systematic review of the literature. Journal of Spatial and Organizational Dynamics, 4(1), 4-20.
- Bhadra, U., Thakkar, N., Das, P. & Bhadra, M. P. (2017). Evolution of circadian rhythms: From bacteria to human. Sleep Medicine, 35, 49-61. DOI: 10.1016/j.sleep.2017.04.0081389-9457
- Cabral, A. C. & Pereira, M. E. (2021). Live your readings - Literary tourism as a revitalization of knowledge through leisure. Revista Turismo & Desenvolvimento, 35, 125-147, https://doi.org/10.34624/rtd.v0i35.24631
- Carneiro, L. & Silva, I. S. (2015). Trabalho por turnos e suporte do contexto organizacional: Um estudo num centro hospitalar. International Journal on Working Conditions, 9, 142-160.
- CITE (2018). Código de Trabalho (versão atualizada a 20 de março de 2018). Retrieved from http://cite.gov.pt/pt/legis/CodTrab\_indice.html
- Costa, G. (2016). Introduction to problems of shift work. In Iskra-Golec, Irena, Barnes-Farrell, Janet, Bohle, Philip (Eds.). Social and Family Issues in Shift Work and Non Standard Working Hours (pp. 19-35), 19-35, Switzerland: Springer.
- Cruz, F. G. S., López-Guzmán, T. & Cañizares, S. M. S. (2014). Analysis of job satisfaction in the hotel industry: A study of hotels in Spain. Journal of Human Resources in Hospitality & Tourism, 13(1), 63-80. DOI: 10.1080/15332845.2013.807394
- Deery, M. & Jago, L. (2015). Revisiting talent management, work-life balance and retention strategies. International Journal of Contemporary Hospitality Management, 27(3), 453-472.
- Demerouti, E., Geurts, S. A. E., Bakker, A. B. B & Euwema, M. (2004). The impact of shiftwork on work - home conflict, job attitudes and health. Ergonomics, 47(9), 987-1002. DOI: 10.1080/00140130410001670408
- Díaz-Carrión, R., Navajas-Romero, V. & Casas-Rosal, J.C. 2020. Comparing working conditions and job satisfaction in hospitality workers across Europe. International Journal of Hospitality Management, 90: 102631. DOI: 10.1016/j.ijhm.2020.102631
- Durrani, A. S. & Rajagopal, L. (2016). Restaurant human resource managers' attitudes towards workplace diversity, perceptions and definition of ethical hiring. International Journal of Hospitality Management, 53, 145-151. DOI: 10.1016/j.ijhm.2015.10.009

- Esen, H., Hatipoğlu, T., Cihan, A. & Fiğlali, N. (2019). Expert system application for prioritizing preventive actions for shift work: Shift expert. International Journal of Occupational Safety and Ergonomics, 25(1), 123-137. DOI: 10.1080/10803548.2017.1350392
- Folkard, S. & Tucker, P. (2003). Shift work, safety and productivity. Occupacional Medicine, 53, 95-101. DOI:10.1093/occmed/kqg047
- Harjanti, D. & Todani, F. A. (2019). Job burnout and employee performance in hospitality industry: The role of social capital. Jurnal Teknik Industri, 21(1), 15-24. DOI: 10.9744/jti.21.1.15-24
- Ihlstrom, J., Kecklund, G., Anund, A. (2017). Split-shift work in relation to stress, health and psychosocial work factors among bus drivers. Work, 56, 531-538. DOI: 10.3233/WOR-172520
- Ishitani, T. T. (2010). Exploring the effects of congruence and Holland's personality codes on job satisfaction: An application of hierarchical linear modeling techniques. Journal of Vocational Behavior, 76, 16-24. DOI: 10.1016/j.jvb.2009.06.014
- Itani, O. & Kaneita, Y. (2016). The association between shift work and health: A review. Sleep Biol. Rhythms. 14, 231-239. DOI: 10.1007/s41105-016-0055-9
- Jansen, N. W. H., Kant, I., Nijhuis, F. J. N., Swaen, G. M. H. & Kristensen, T. S. (2004). Impact of worktime arrangements on work-home interference among Dutch employees. Scandinavian Journal of Work, Environment & Health, 30(2), 139-148.
- Jones, C. R., Huang, A. L., Ptáček, L. J. & Fu, Y. (2013). Genetic basis of human circadian rhythm disorders. Experimental Neurology, 243, 28-33. DOI: 10.1016/j.expneurol.2012.07.012
- Kao, C., Tsaur, S. & Wu, T. (2016). Organizational culture on customer delight in the hospitality industry. International Journal of Hospitality Management, 56, 98-108. DOI: 10.1016/j.ijhm.2016.05.001 0278-4319
- Khan, S., Duan, P., Yao, L. & Hou, H. (2018). Shiftworkmediated disruptions of circadian rhythms and sleep homeostasis cause serious health problems. national Journal of Genomics, 2018(4), 1-11, DOI: 10.1155/2018/8576890
- Kim, W., Kim, T. H., Lee, T.H. & Choi, J. W. (2016). The impact of shift and night work on health related quality of life of working women: Findings from the Korea Health Panel. Health and Quality of Life Outcomes, 14(162). DOI: 10.1186/s12955-016-0564-x

- Kim, H. S., & Jang, S. (2020). The effect of increasing employee compensation on firm performance: Evidence from the restaurant industry. International Journal of Hospitality Management, 88:102513. DOI: 10.1016/j.ijhm.2020.102513
- Knutsson, A. (2004). Methodological aspects of shift-work research. Chronobiology International. The Journal of Biological and Medical Rhythm Research, 21(6), 1037-1047. DOI: 10.1081/CBI-200038525
- Magnini, V. P. (2009). Understanding and reducing workfamily conflict in the hospitality industry. Journal of Human Resources in Hospitality & Tourism, 8(2), 119-136. DOI: 10.1080/15332840802269643
- Marshall, K. (1998). Couples working shift. Perspectives on Labour and Income, 10(3), 9-14.
- Martins, D., Pinto, A. & Silva, S. (2018). Trabalho por turnos: O impacto no equilíbrio da vida pessoal e profissional. In Joaquim Fernandes, Fernanda Matias, Celísia Baptista, Ana Melo Elidomar Alcoforado (Eds). Estratégias, Tendências e Desafios da Gestão (pp. 283-300). TMS Conferences Series, Faro: Universidade do Algarve. ISBN 978-989-8859-56-3
- McMenamin, T. M. (2007). A time to work: Recent trends in shift work and flexible schedules. Monthly Labor Review, 130(2), 3-15.
- Moon, H. J., Lee, S. H., Lee, H. S., Lee, K. & Kim, J. J. (2015). The association between shift work and depression in hotel workers. Annals of Occupational and Environmental Medicine, 27(29), 1-11. DOI: 10.1186/s40557-015-0081-0
- Moreno, C. R. C., Fischer, F. M. & Rotenberg, L. (2003). A saúde do trabalhador na sociedade 24 horas. São Paulo em Perspectiva, 17(1), 34-46.
- Perrucci, R., MacDermid, S., King, E., Tang, C. Brimeyer, T., Ramadoss, K., Kiser, S. J. & Swanberg, J. (2007). The significance of shift work: Current status and future directions. Journal of Family and Economic Issues, 28, 600-617.
- Pieh, C., Jank, R., Waib, C., Pfeifer, C., Probst, T., Ahmann, C. & Oberndorfer, S. (2018). Night-shift work increases cold pain perception. Sleep Medicine, 45, 74-79. DOI: 10.1016/j.sleep.2017.12.014
- Plyushteva, A. (2019). Commuting and the urban nocturnal mobilities in tourism and hospinight: tality work. Journal of Policy Research in Tourism, Leisure and Events, 11(3), 407-421. 10.1080/19407963.2018.1556673

- Prata, J. & Silva, I. S. (2013). Efeitos do trabalho em turnos na saúde e em dimensões do contexto social e organizacional: Um estudo na indústria eletrônica. *Revista Psicologia: Organizações e Trabalho, 13*(2), 141-154.
- Saah, F.I & Amu, H. (2020). Sleep quality and its predictors among waiters in upscale restaurants: A descriptive study in the Accra Metropolis. *PLoS ONE 15*(10), e0240599. https://doi.org/10.1371/journal.pone.0240599.
- Sánchez-Medinaa, A. J., Arteaga-Ortiz, J., Naumchik, R. M., & Pellejero (2020). The intention to quit entrepreneurship in tourism SMEs: The effect of work addiction. *International Journal of Hospitality Management*, 89: 102400. DOI: 10.1016/j.ijhm.2019.102400
- Sharma, B. (2019). Review of human resource practices in hospitality and tourism. *Journal of Hospitality, 1*(1), 15–30. https://research.usc.edu.au/discovery/fulldisplay/alma99450877202621/61USC\_INST:ResearchRepository
- Shen, J. & Dicker, B. (2008). The impacts of shiftwork on employees. The International Journal of Human Resource Management, 19(2), 392-405. DOI: 10.1080/09585190701799978
- Silva, H. & Silva, I. (2015). Gestão e adaptação aos horários de trabalho: Um estudo de caso no setor hoteleiro. International Journal on Working Conditions, 9, 99-116.
- Silveira, M., Camponogara, S., Beck, C. L. C., Da Costa, V. Z., Dalmolin, G. L. & Arboit, E. L. (2016). Trabalho noturno e seus significados para enfermagem de unidade de cuidados intensivos. *Revista Enfermagem UERJ*, 24(6), 1-6.DOI: 10.12957/reuerj.2016.17416
- Sirgy, M. J. & Lee, D. (2018). Work-Life balance: An integrative review. *Applied Research Quality Life, 13,* 229–254. DOI: 10.1007/s11482-017-9509-8
- Teixeira, S. J. (2019). Quality management in tourism services A Literature review and case

- study. Revista Turismo & Desenvolvimento, 32, 9-24, https://doi.org/10.34624/rtd.v0i32.20435
- Unsal-Akbıyık, B. S. & Zeytinoglu, I. U. (2018). "We are like a family!": Flexibility and intention to stay in boutique hotels in Turkey. *Industrial Relations*, 73(2), 319-342.
- Varum, C., Madeleno, M., Robaina, M. & Dias, M. (2017).
  Eco Inovação Será diferente para os hotéis e restaurantes? Revista Turismo & Desenvolvimento, 27/28(1), 111-122, https://doi.org/10.34624/rtd.v1i27/28.23740
- Yirik, S., Oren, D. & Ekici, R. (2015). Determination of organizational stress and organizational burnout levels of mid level managers working in four and five star hotel businesses. *International Review of Management and Marketing*, 5(2), 52-60.
- Wadsworth, L. L. & Facer, R. L. (2016). Work–family balance and alternative work schedules: Exploring the impact of 4-day workweeks on state employees. *Pu-blic Personnel Management*, 45(4), 382-404. DOI: 10.1177/0091026016678856
- Wedderburn, A. (2000). Shiftwork and health. BEST European Studies on Time. Dublin: European Foundation for the Improvement of Living and Working Conditions.
- Williams, C. (2008). Work-life balance of shift workers. Perspectives on Labour and Income, 9(8), 5-16.
- World Travel & Tourism Council (WTTC). Travel & Tourism Economic Impact | World Travel & Tourism Council (WTTC), accessed 04 December 2020 https://wttc.org/Research/Economic-Impact
- Zhao, X., Ghiselli, R., Law, R., & Ma, J. (2016). Motivating frontline employees: Role of job characteristics in work and life satisfaction. *Journal of Hospitality and Tourism Management*, 27, 27-38. DOI: 10.1016/j.jhtm.2016.01.010