

# Shift Work and Quality of Life on Tourism, Hospitality and Restaurant Industry: The Portuguese Context

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**Abstract:** This research aims to study the association between shift work and the quality of life of workers. On the one hand quality of life includes several aspects of life (e.g. personal, family, marital or social) and serves as an important aspect in understanding the well-being of individuals in relationship with work life. On the other hand, shift work can be defined as any work organization of working hours that differs from the traditional diurnal work period. Furthermore, they are two factors strongly related, considering the increasing use of shift work in industry and services, especially from tourism, hospitality, and restaurant sectors, where shift work has the potential to disrupt different aspects of quality life. The main objective of this study is to characterize the quality of life of shift workers in the tourism, hospitality, and restaurant industry. More specifically to characterize their workers' personal life, family life, marital life, and social life. Through an online questionnaire, data were collected from 122 shift workers linked to the tourism, hotel, and restaurant industry in Portugal. Data were analysed with IBM SPSS 27.0. Results showed significant differences between workers from fixed and rotative shifts for the personal life satisfaction level whereas workers from fixed shifts reported higher levels of satisfaction. Workers in the morning shift reported higher levels of personal life and family life satisfaction than workers that are not in the morning shifts. There are no differences between the satisfaction levels for workers from the afternoon, night, or weekend shifts. There are no differences among the marital life satisfaction according to the kind of shift (fixed or rotative; morning, afternoon, night, or weekend shift). This study provides several insights into the shift work theory and practice and contributes to knowledge of how human resource management will be reconfigured some practices to support the quality of life of shift workers in this industry. Limitations and future research suggestions are drawn in the last part of the paper.

**Keywords:** quality of work-life, shift work, quality of social life, quality of personal life, quality of marital life

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## 1. Introduction

Most jobs, including those related to tourism, hospitality, and the restaurant services, operate on a continuum timetable. The shift work has grown rapidly covering 24 hours per day, with different workers on different shifts (Martins, Amaro & Silva, 2021). In many countries, a considerable number of workers could be considered associated with a non-traditional daytime shift (Wickwire et al, 2017; McElroy, Olney, Hunt, Glennon, 2020). According to the Eurostat website, between 2011 and 2019 shift work has been growing almost 1% (from 17,5% to 18,3%), although in 2020 this value decreased by 17,7% it is possible to explain this decrease can be associated with the covid-19 pandemic.

Despite growing interest in the concepts of shift work and quality life, the interaction between both is not well understood, especially the quality of life of workers linked with tourism, hospitality, and restaurant services (Penny & Joanne, 2013; Sun, XU, Köseoglu & Okumus, 2020; Wang, Berbekova & Uysal, 2022), missing empirical findings within this services sector related to job quality and which job characteristics make a "good or a bad" job (Findlay et al, 2013; Kalleberg, 2016; Myhill, Richards & Sang, 2021).

According to International Labour Organisation (ILO), good work is defined as "opportunities for work that are productive and deliver a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organise and participate in the decisions with affect their lives and equality of opportunity and treatment for all men and women" (ILO, 2017, n.p.). Thus, job quality represents a core issue in Human Resource Management (HRM) and is associated with employee satisfaction and motivation (Grote & Guest, 2017; Myhill et al., 2021). On the one hand, job quality is related to job security, safe working conditions, job satisfaction such as wages and benefits levels (Myhill et al., 2021; Wang et al., 2022). On the other hand, job quality can be influenced by individual and contextual factors, including worker characteristics and preferences as well as the broader labour market context (Loughlin & Murray, 2013; Myhill et al., 2021), such as career advancement.

Several studies (e.g. Kim et al., 2016; Martins et al., 2021; Penny & Joanne, 2013, Perrucci et al., 2007, Sirgy & Lee, 2018) have been raised concerning the quality of life of workers who perform their professional activities in the shift work regime. Furthermore, tourism, hospitality, and restaurant activities worldwide has been confronted with the problem of attracting and retaining talent, where turnover rates are high and employees leave for reasons including low job satisfaction, poor working conditions and a lack of work motivation (Penny & Joanne, 2013). Thus, this research would like to understand whether shift workers tourism, hospitality, and restaurant services have a good quality of life in order to contribution to enhance the job satisfaction of shift workers and to reduce their turnover intention.

This research aims to characterize the quality of life of shift workers in the tourism, hospitality, and restaurant services. More specifically to characterize their workers' personal life, family life, marital life, and social life.

The next section presents the main literature about the relationship between shift work and the quality of life of workers, particularly on tourism, hospitality, and restaurant activities. Then, on section three outlines, we present the methodological approach, and section four presents the main findings of the study. Lastly, we discuss the main results, and present at the end the main conclusions, limitations and some of the directions for future research.

## **2. Literature review**

### **2.1 Shift work**

Shift work refers to a wide variety of working time arrangements, including all working hours that are outside the normal daytime ones which may consequently lead to a different impact on employee's performance and well-being (Dall'Ora, Ball; Recio-Saucedo & Griffiths, 2016).

McElroy and colleagues (2020) identified some studies (e.g. Proper et al., 2016) about shift work, including workers from various industries and countries, and found strong evidence to support the relationship of shift work to weight gain, overweight, and impaired glucose tolerance. This risk rises when the job is doing night shift work and with rotating shift schedules as well as increase the risk of operational errors and accidents (McElroy et al., 2020; Sun et. al, 2020), fatigue, disturbed sleep, performance and safety (Dall'Ora et al., 2016; Mélan & Cascino, 2022; Wang et al., 2022). Furthermore, shift workers tend to be more difficulties in their family life, marital life (Perrucci et al. 2007).

Mélan & Cascino (2022) suggest that the main short-term effects of shift work include reduced sleep quality and daytime alertness for night and morning work as a result of circadian misalignment and a sleep debt with early starts of morning work.

In organisational context, shift work schedules according to ergonomic criteria are associated with a switch from slow to fast and from backward to forward-rotating systems, and self-scheduling improved health and work-life balance (Bambra et al., 2008, cited by Mélan & Cascino, 2022).

In recent years, the concept of work-life balance has become an important issue. According to Sun and colleagues (2020), work-life balance means the context of work and the activities outside of work. Thus, balance "is a metaphor and the state of work-life balance in an individual's subjective perception that his or her work and personal life are compatible according to personal values and preferences" (p. 2). Sun and colleagues (2020, based on Clark, 2000:751) clarifies that "work-life balance is generally measured by work satisfaction, life satisfaction and role conflict".

Considering that tourism, hospitality and restaurant activities are characterized by 24-h operations, shift work is common for several services. Thus, individuals who work on these services have more difficulties maintaining a work-life balance and a healthy lifestyle (Kim et al., 2016; Perrucci et al., 2007). Furthermore, shift work is frequently associated with rotative shift and night work and as referred by Kim et al. (2016) these regimes of shifts indicate more problems related to the worker *physical and psychological* well-being.

## **2.2 Quality of Life in the work environment**

Quality of life in the work environment as introduced in decade 1970 is associated with conditions for the working life of workers (Penny & Joanne, 2013). Several researchers define the concept of quality of work-life as on specific facets of work-life in terms of life satisfaction, leisure, and well-being beyond the workplace and work-related behaviours such as absenteeism, job involvement, intention to quit, and organisational commitment (Ouppara & Sy, 2012; Penny & Joanne, 2013). Furthermore, Penny & Joanne (2013:349) define quality work-life “as the favourable conditions, opportunity to use and develop human capacities, opportunities for growth, development, and advancement, social integration to the work environment, constitutionalism, social relevance, and work-life balance”.

Quality of work-life refers to a person’s subjective perception of his/her work and the total working environment such as the compensation and development opportunities (Penny & Joanne, 2013; Sirgy et al., 2001; Sun et al., 2020). As refed by Sun and colleagues, (2020:3) “overall quality of life of individuals is a cognitive evaluation of satisfaction with various life domains such as physical health and psychological and social relationships”. Good quality of life can increase job satisfaction and task performance, reduce absenteeism and turnover rate (Penny & Joanne, 2013; Sun et al., 2020). Although, when the quality of life is bad tasks, physical work environment, social environment in the organisation, and work-life balance are affected (Penny & Joanne, 2013). Thus, quality of work-life allows giving to workers the opportunity to participate in managing their work, make decisions about their jobs, as well as to receive more from their jobs (Ouppara & Sy, 2012).

Quality of life in the work environment has gained growing interest and importance among researchers and practitioners linked to the tourism, hospitality, and restaurant services, considering the high work stress among employees from these services, especially those who work on shift work. Thus, on the one hand, Penny & Joanne (2013) suggest that a shift work system leaves little time for the non-work environment such as family, friends, and their own health. Non-work life and work-life are two important fields affecting one another (Erdamar & Demirel, 2014). On the other hand, Erdamar and Demirel (2014) underline that these workers report more fatigue, work stress, worse performance and feel less competent at work, and consequently more dissatisfaction and a greater desire to leave the organisation. Furthermore, when shift workers are not given the freedom by the organisation to develop their work based on flexible working hours by choosing the desired shift, but instead are required to be fully available to work fixed shifts and especially night shifts, the quality of life at work tends to be affected.

Therefore, this paper analyses the workers’ perception of professional, personal, family, social, and marital dimensions according to the kind of shift performed: fixed or rotative; morning, afternoon, night, and weekend shifts.

## **3. Design method**

This study uses a quantitative methodology having a cross-sectional and descriptive nature to answer the research question “What is the relation between shift work and several dimensions of working life quality?”.

### **3.1 Instrument**

To answer the objectives of the study a questionnaire was built. The questionnaire had 27 closed questions organised in 2 sections. The first section was related to sociodemographic characterization with questions such as gender, age, marital status, kind of shift performed. The second group aimed to characterize the satisfaction level of the workers with the kind of shift in personal life, family life, marital life, and social life. The questions were 4-points Likert scale varying from 1 – very unsatisfied to 4 – very satisfied. We choose to use a 4-points Likert scale to have the same number of positive and negative options. None of the questions were mandatory. Therefore, participants could choose not to answer the question.

### **3.2 Sample**

The population of our study was shift workers linked to the tourism, hotel, and restaurant service in Portugal. Therefore, using a convenience sample, participated in our study 122 shift workers, 61 (50%) males, and 61 (50%) females. Regarding their marital status, most of them were married (n=60, 49%) or single (n=57, 47%). They had a graduation (n=54, 45%) or high school graduation (n=55, 45%).

Regarding the kind of shift performed, 90 (74%) participants had rotative shifts and 32 (26%) participants had fixed shifts. Additionally, we asked during which period they had done the shift and workers could do several kinds of shifts whereas 112 (92%) have the morning shift, 90 (74%) the afternoon shift, 46 (38%) the night shift and 68 (56%) the weekend shift.

### 3.3 Procedure and data analysis

The questionnaire was elaborated to achieve the study objectives. It was sent an e-mail explaining the objectives with the questionnaire link. After the application of the questionnaires, a database was built using IBM SPSS, version 27.0, and all the answers were inserted. After entering the data, we proceeded to its analysis.

The analysis phase began with the descriptive analysis, whereas central tendency measures and dispersion measures were calculated for all the variables. To test our hypothesis, it was calculated composite variables for personal life, family life, and social life. These composite variables were the mean of the several items evaluating the dimension. Several t-tests for independent samples were performed to analyse the differences between the kind of shift for professional, personal, social, and family dimensions. For analysing the differences in the marital dimension, Chi-square tests were performed. The confidence level used was 95%.

### 4. Results

Regarding the satisfaction with the several life dimensions, our results showed that our participants had a positive satisfaction with these dimensions. These variables can range from 1 to 4. The most positive satisfaction is with social ( $\bar{x}=2,67$ ,  $SD=.72$ ) and family ( $\bar{x}=2,67$ ,  $SD=.93$ ) and the less positive is the personal dimension ( $\bar{x}=2,27$ ,  $SD=.64$ ). The average of satisfaction with the professional dimension is 2,75 ( $SD=.66$ ). When considering marital satisfaction, 81 participants (66%) are unsatisfied with this dimension.

To analyse possible differences according to fixed or rotative shifts, several independent t-tests were performed. Our results showed significant differences for the personal dimension ( $Z=10.32$ ,  $p=.002$ ) whereas the workers who performed fixed shifts reported higher satisfaction levels ( $\bar{x}=2,53$ ). For professional dimension ( $Z=.94$ ,  $p=.333$ ), family dimension ( $Z=.119$ ,  $p=.27$ ), or social dimension ( $Z=.16$ ,  $p=.69$ ), there were no significant differences between fixed and rotative shifts. For the marital status, a Chi-square test was performed. The results did not show any difference between groups ( $X^2=.070$ ,  $p=.791$ )

Concerning the differences in each kind of shift, our results did not show any significant difference. Table 1 presents the results of one-sample t-tests for the morning shift.

**Table 1:** Independent t-test considering the morning shift for professional, personal, family, and social dimension

	Z	Sig.
Professional	.152	.697
Personal	.263	.606
Family	1,607	.207
Social	.001	.975

Regarding the marital dimension, there are no significant differences for performing or not performing the morning shift ( $X^2=.777$ ,  $p=.378$ ).

Table 2 shows that there are no significant differences for the afternoon shift.

**Table 2:** Independent t-test considering the afternoon shift for professional, personal, family, and social dimension

	Z	Sig.
Professional	.003	.959
Personal	.068	.795
Family	.144	.705
Social	.073	.788

Regarding the marital dimension, there are no significant differences for performing or not performing the morning shift ( $X^2=.170$ ,  $p=.68$ ).

Table 3 shows that there are no significant differences for the night shift.

**Table 3:** Independent t-test considering the night shift for professional, personal, family, and social dimension

	Z	Sig.
Professional	3,327	.071
Personal	.046	.830
Family	.291	.590
Social	1,537	.218

Regarding the marital dimension, there are no significant differences for performing or not performing the morning shift ( $\chi^2=1.398.170$ ,  $p=.237$ ).

Table 4 shows that there are no significant differences for the weekend shift.

**Table 4:** Independent t-test considering the weekend shift for professional, personal, family, and social dimension

	Z	Sig.
Professional	.626	.430
Personal	.974	.326
Family	2,622	.108
Social	.506	.478

Regarding the marital dimension, there are no significant differences for performing or not performing the morning shift ( $\chi^2=.464$ ,  $p=.496$ ).

## 5. Discussion and conclusions

This study aimed to characterize the quality of life of shift workers in tourism, hospitality, and restaurant services. Shift work is a very common practice in tourism and hospitality activities. Moreover, previous research has defined quality of work-life as a person’s subjective perception of his/her work and the total working environment such as the compensation and development opportunities (Penny & Joanne, 2013; Sirgy et al., 2001; Sun et al., 2020).

Therefore, most of our participants performed rotative shifts mainly in the morning and in the afternoon period. Regarding the satisfaction with the quality of work-life, we can observe that most of our workers reported a positive satisfaction level with the personal, professional, social, and family dimensions of this quality of life. These results did not reinforce previous studies that associate the shift work to lower quality of life and lower physical and psychological well-being (cf. Mélan & Cascino, 2022; Kim et al., 2016). Although we observe different results for the satisfaction level of the marital dimension, most of our workers reported that they were not satisfied with their marital quality of life. This result is in line with the Perrucci et al. (2007) findings.

Regarding the quality of work-life differences according to the kind of shift performed we only observed significant results for the personal dimension of the quality of work-life. Our results showed that workers performing the fixed shift have a higher perception of their personal quality of life. Furthermore, when considering the several shifts schedules, we did not observe significant differences in any dimension of their quality of work-life. These results are contradictory to most studies in this field. We can raise some possibilities to understand this issue. One of our main arguments is the fact that most of our workers are performing rotative shifts during the morning and the afternoon period. So, we are considering periods of working hours similar to a current work schedule. On the other hand, most of the studies associated less quality of life to the female gender and to the need for more time to take care of the children. In our study, we have an equal gender representation, and a significant number of workers are single, therefore, with less probability of having difficulties with work-life balance and reporting higher levels of quality of work-life (e.g Albertsen et al., 2008; Sirgy & Lee, 2018)

### 5.1 Limitations and suggestions for future research

The study is limited in terms of the kind of shift performed, that is, it is based on a modest sample of fixed shift workers and likened with the night shift. Findings are also limited in terms of marital dimension which have no significant differences on several kinds of shift. Thus, we suggest that future research includes more balanced among the several kinds of shifts and focus one sample exclusively on married shift workers. Consequently, a future longitudinal study could help understand, maybe, if more seniority on shift work regime, age group, and

other demographics characteristics affecting satisfaction with the several life dimensions of these shift workers. In addition, a comparison between traditional and shift workers could be made to explore differences in the quality of life of workers.

## 5.2 Final conclusions

The findings provide a better understanding of insight related to the quality of life of shift workers. In this study, on the one hand, shift workers are more satisfied with professional, social, and family life but reported less satisfaction with personal life dimensions. Moreover, most of the workers are not satisfied with their marital quality of life.

Our results did not show significant differences between performing the rotative or the fixed shift work with the satisfaction of several dimensions of their quality of life. Although our results showed significant differences for the type of shift work in the personal life dimension, the workers from the fixed shift reported higher personal satisfaction levels for professional.

Considering the shifting schedules – morning, afternoon, night, or afternoon- there were no significant differences in the satisfaction of the workers with the several dimensions of their quality of life.

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