

SHIFT WORK AND ITS IMPACTS ON FAMILY LIFE AND SOCIAL LIFE FROM CHILDREN'S PERSPECTIVE

Soraia Gonçalves¹, Orcid: <http://orcid.org/0000-0002-0200-5847>

Isabel Silva^{1,2}, Orcid: <https://orcid.org/0000-0002-2931-7218>

Ana Veloso¹, Orcid: <https://orcid.org/0000-0002-2417-2910>

ABSTRACT. In researches about the impact shift work has on the social and family domains, the effects are more commonly studied from the workers perspective. Bearing this in mind, the present research intends to understand the impacts of shift work on the family and social domains in the perspective of shift workers' children. Nineteen children from shift working parents took part in this research. Data was collected through a semi-structured interview addressing topics such as family time, communication, and school support. In general, the results indicate negative effects (family time, parental education, school support, regular activities, occasional activities, and communication), positive effects (school support, follow-up occasional activities), or no effects perceived in the areas evaluated. The impacts perceived by children in the different areas evaluated are largely dependent on the parents' type of work schedule, flexibility allowed, and the management of working hours (e.g., possibility of exchange shifts or not).

Keywords: Shift work; family and social life; children's perspective.

TRABALHO POR TURNOS E VIDA FAMILIAR E SOCIAL NA PERSPECTIVA DOS/AS FILHOS/AS

RESUMO. Nos estudos sobre o impacto do trabalho por turnos nos domínios social e familiar é mais comum os efeitos serem estudados ao nível do/a trabalhador/a e na sua própria perspectiva. Tendo em consideração tal constatação, o presente estudo pretende compreender o impacto do trabalho por turnos na esfera familiar e social, tendo em conta a perspectiva dos/as filhos/as de trabalhadores/as por turnos. Participaram no estudo 19 filhos/as de trabalhadores/as por turnos. A recolha de dados foi realizada por meio de entrevista semiestruturada, tendo esta abordado temas como tempo em família, comunicação ou acompanhamento escolar. De um modo geral, os resultados indicaram a existência quer de impactos negativos (tempo em família, educação parental, acompanhamento escolar, atividades regulares, atividades pontuais e comunicação), quer de impactos positivos (acompanhamento escolar, atividades pontuais) ou, sem percepção de impacto, nas áreas avaliadas. O impacto percebido pelos/as filhos/as nas diferentes áreas avaliadas está em boa medida dependente do tipo de horário de trabalho a que está sujeito o progenitor que labora por turnos e da flexibilidade permitida ou não pela organização na gestão dos horários de trabalho (ex., possibilidade ou não de permutas).

Palavras-chave: Trabalho por turnos; vida familiar e social; perspectiva dos filhos.

¹ Universidade do Minho, Escola de Psicologia, Departamento de Psicologia Aplicada, Braga, Portugal.

² Email: isilva@psi.uminho.pt



TRABAJO POR TURNOS Y VIDA FAMILIAR Y SOCIAL EN LA PERSPECTIVA DE LOS/LAS HIJOS/AS

RESUMEN. En los estudios del impacto del trabajo por turnos en los dominios social y familiar es más común que sean estudiados al nivel del trabajador y en su propia perspectiva. Teniéndolo en consideración, este estudio tiene como objetivo comprender el impacto del trabajo por turnos en el ámbito familiar y social, teniendo en cuenta la perspectiva de los/as hijos/as de los trabajadores/as por turnos. La recogida de datos se realizó por intermedio de entrevista semi estructurada, abordando temas como tiempo en familia, comunicación o seguimiento escolar. De un modo general, los resultados indicaron la existencia tanto de impactos negativos (tiempo en familia, educación parental, seguimiento escolar, actividades regulares, actividades puntuales y comunicación) como de impactos positivos (seguimiento escolar, actividades puntuales) o, sin percepción de impacto, en las áreas evaluadas. El impacto decepcionado por los/as hijos/as en las diferentes áreas evaluadas esta depende en gran parte del tipo de horario de trabajo del progenitor que trabajo por turnos y de la flexibilidad permitida o no por la organización en la gestión de los horarios de trabajo (ej. Posibilidad o no de permutas).

Palabras clave: Trabajo por turnos; vida familiar y social; perspectiva de los hijos.

Introduction

Working hours and shift work

Globally, we have seen a constant increase in demand for services and products, which has increased competitiveness among different types of organizations often forcing them to expand their productivity (Winkler, Mason, Laska, Christoph, & Neumark-Sztainer, 2018). In order to follow such expansion, there have also been changes in working hours, particularly an increase in the hours designated as 'atypical' (i.e., different from conventional working hours). This designation has been used in reference to all hours that differ from the more conventional working hours; Monday to Friday, from 9 a.m. to 5 p.m. It is usually referred to working at night, rotating shifts, and working during the weekend (Winkler et al., 2018). Shift work is included in atypical working hours. Bearing in mind that the following study was conducted in Portugal, it is imperative to stress out the definition of shift work in accordance with Law 7/2009 of 12 February, which regulates the Portuguese Labor Code. In this legislation, the shift work is defined as:

Any organization of team work in which workers successively occupy the same work stations at a certain rate, including rotating shifts, continuous or discontinuous, and may perform the work at different times in a given period of days or weeks (Article 220°).

In the cited legislation, rules of protection for shift workers were also defined. For example, working shifts are organized, as far as possible, according to the preference of the workers. The duration of each shift cannot exceed the maximum limit of normal working periods, or the worker can only change shifts after the weekly rest day (Article 221°). According to Eurostat (2020), in 2018, 18.3% of workers in the 28 Member States of the

European Union worked in shifts, while Portugal registered 19.1% shift workers in the total number of workers registered in the country.

Impact of shift work at family and social level

Several studies (e.g., Barnett & Gareis, 2007; Jensen, Larsen, & Thomsen, 2018; Lindsay & Maher, 2014; Mott, Mann, McLoughlin, & Warwick, 1965; Strazdins, Korda, Lim, Broom, & D'Souza, 2004; West, Mappedzahama, Ahern, & Rudge, 2012) have been conducted in order to identify the advantages and disadvantages of the shift work.

The most 'positive aspects' encompass economic benefits along with temporal reorganization (Strazdins, Clements, Korda, Broom, & D'souza, 2006; West et al., 2012), greater role sharing among the couple (Lindsay & Maher, 2014), and more free time to spend with their children (Strazdins et al., 2004; Tausig & Fenwick, 2001; West et al., 2012). For example, Barnett and Gareis (2007) conducted a study in the United States involving 55 married nurses and their children. These nurses had two different working schedules ('day shift' - 7 a.m. to 3 p.m. and 'afternoon shift' - 3 p.m. to 11 p.m.). The results of the study revealed that the mothers' work shift was a significant predictor of the time that fathers spent with their children. Specifically, results indicated that when mothers worked in the afternoon shift, fathers spent more time with their children than when mothers worked in the day shift. However, no significant differences were found in the time that mothers spent with their children independently on their work shift. Non-standard working hours can also be advantageous for those parents who live in the same home, because they allow one of them to be available to care for their children while the other is at work.

As far as the 'negative aspects' are concerned, the most highlighted aspects are related to working at night and working at socially valued hours (e.g., weekends). This has consequences in three main areas: health (such as sleeping complaints), social and family life (such as increased difficulties in participating in social activities), and the organizational scope (such as reduction in safety) (Silva, Prata, & Ferreira, 2014).

In general, the research that studies the effects of shift work in the social and family domains is more scarced as compared to the one that investigates the effects in health domain (Matheson, O'Brien, & Reid, 2014). Despite this fact, the research on the impacts of shift work on family life has shown the existence of several affected areas. Some studies (Mills & Taht, 2010; White & Keith, 1990) pointed to the marital relationship as one of these areas although the results found are not consistent. For example, in the study by White and Keith (1990), the results indicated that in the couples where one of the spouses worked in shifts, there was a higher probability of divorce. The couple spent less time together, and there was less marital satisfaction. Another study by Mills and Taht (2010) analyzed the impacts of non-standard working hours on the quality of the Dutch couples' relationship, which were grouped into the following categories: 'fixed morning shift' - when most of the working hours were from 8 a.m. to 4 p.m.; 'fixed afternoon shift' - from 4 p.m. to 12 p.m.; 'fixed night shift' - from 12 p.m. to 8 a.m., and 'variable hours' - when they could not identify a pattern in working hours. The results indicated that only the 'variable time' category had a clear impact on the quality of the couple's relationship, and partner support was a crucial factor in maintaining good relationships. One of the variables that can also moderate these negative effects of shift work in families has to do with the worker's choice or not for this type of schedule. For example, some parents have the possibility to choose to work in shifts and choose the shift they want to work so that they can spend the day with their children (Strazdins et al., 2004; Tausig & Fenwick, 2001), while others work in shifts because it is a job requirement (Bihan & Martin, 2004).

As there are changes in the organization of working time, families have also changed over the years, such as the entry of women into the labor market or the transformation of household composition. For example, in 1974, around 1.4 million women were working in Portugal, while in 2019, around 2.4 million were working, showing an increase of one million women employed in the span of 45 years (Pordata, 2020). According to Oláh, Kotowska and Ritcher (2018), these changes are prone to trigger conflicts in the performance of family roles and the relationships established between members of the same household. Relationships, whether marital or parental, necessitate joint activities, such as dinners or weekend outings, where it is possible to build intimacy, give and receive support, or even repair conflicts when they exist (Strazdins et al., 2006). Another fact verified in studies with families of shift workers is that they spend less time together, thus interfering with routines (e.g., family meals) and important family activities for maintaining family closeness (Tai et al., 2014). This dearth of family time arises from the fact that the hours that the shift worker has available are often incompatible with those of other family members. In addition, owing to problems related to the quantity and quality of shift workers' sleep, they often feel low on energy, impairing their participation in family activities (Presser, 2003). On the other hand, shift workers sometimes tend to give up their leisure and rest time, or the time they could spend with their spouses to be with their children in an endeavor to compensate them. This dynamic may increase the time parents spend with their children, however it may create certain conflict in the marital relationship (La Valle, Arthur, Millward, Scott, & Clayden, 2002).

Another area that seems to be affected by shift work is the school support of children. In the study by Mott et al. (1965), the results indicated that shift workers, as compared to conventional time workers, felt less able to successfully support their children's school tasks, provide them company, and deal with issues related to control and discipline. Also, La Valle et al. (2002) in a study in the United Kingdom corroborated this idea. The authors found that as compared to parents with a conventional schedule, parents who worked at atypical times (e.g., nights and weekends) spent less time performing activities with their children, such as read, play, help with homework, and attend school activities.

Other studies (Barton, Aldridge, & Smith, 1998; Li et al., 2014; Strazdins et al., 2004) endeavored to understand the impacts of shift work on the general well-being of children. For example, Barton, Aldridge and Smith (1998) compared the emotional state of the children of shift workers with the children of conventional workers. The results indicated that the daughters of shift workers had more depressive symptoms and a lower self-esteem than the daughters of conventional working parents. However, no significant differences were observed in the levels of depression and self-esteem between the male children of shift workers and the male children of conventional workers. In the same sense, in the study by Strazdins et al. (2004), carried out in Canada, families were grouped into one of four categories, taking into account the parents' working hours: a) both parents work in a standard working schedule (daytime during the week); b) both parents work in a non-standard working schedule (evening, night, split or rotating shifts, and weekends); c) the father works in a non-standard working schedule and the mother works in a standard schedule; d) the mother works in a non-standard working schedule and the father works in a standard schedule. The results revealed that the children's well-being was influenced by their parents' working hours. The children whose one or both parents worked at non-standard working hours had more emotional or behavioral difficulties as compared to children of parents who worked at standard working hours.

A study conducted, in South Africa, by Sizane and Van Rensburg (2011) compared the perceptions of night shift working mothers with the perceptions of non-shift working

mothers with regards to their relationship with their adolescent children. The same comparison was made with their children's perceptions. The results indicated that the children of mothers who did not work at shifts perceived communication with their mothers as more efficient than the children of night shift working mothers.

In short, the available evidence suggests that shift work performed by parents has repercussions in areas such as family time, communication with children, or school support. On the other hand, such evidence has been obtained from the shift worker's own perspective, so integrating the third-party's perspective - in this case, children - will help deepen the understanding of the impacts. In view of the literature review carried out, this study intends to contribute to the understanding of the impacts of shift work in the family and social sphere, giving due consideration to the perspective of the children of shift workers.

Method

Participants

A more detailed characterization of the sample can be found in Table 1.

Table 1. Sociodemographic and professional characterization of shift workers and their children

Variables	Worker		Child	
	n	%	n	%
Number of participants			19	100
Age $M (SD)^a$	48.53 (5.71)		20.53 (2.14)	
Sex				
Female	13	68.4	12	63.2
Male	6	31.6	7	36.8
Level of education				
1 st Cycle of Basic Education ^b	1	5.3	-	-
2 nd Cycle of Basic Education ^b	3	15.8	-	-
3 rd Cycle of Basic Education ^b	3	15.8	1	5.3
Secondary Education ^b	5	26.3	10	52.6
University Education	7	36.8	8	42.1
Working Schedule ^c				
Rotating (morning, afternoon and night)	9	47.3		
Rotating (morning and afternoon)	7	36.8		
Rotating (night and morning)	1	5.3		
Fixed night	1	5.3		
Fixed late	1	5.3		
Antiqueness in current profession $M (SD)^a$	16.45 (12.37)			
Antiqueness in current schedule $M (SD)^a$	11.66 (12.63)			

Source: The authors.

Note. ^a M (Mean), SD (Standard Deviation).

^bThese levels in Brazil correspond, respectively, to Elementary School and High School.

^cBecause of the high variety of schedules practiced by parents (e.g., beginning and end of their shifts), these were grouped into large categories.

Instruments

Sociodemographic and professional questionnaire

The sociodemographic and professional data of the participants was collected through a questionnaire developed for this study. This questionnaire aimed to collect sociodemographic information from the participants (e.g., age, gender) as well as the professional situation of shift working parents (e.g., time, antiqueness in current working schedule).

Interview

The script of the interviews conducted in this study is semi-structured and was developed based on the literature review that highlighted the following areas of impact of shift work: family time (e.g., Strazdins et al., 2006; Tai et al., 2014), "communication with children" (e.g., Sizane, & Rensburg, 2014), school support (e.g., La Valle et al., 2002; Mott et al., 1965), support in children's extracurricular activities (e.g., La Valle et al., 2002), and parental education (e.g., Mott et al., 1965). In the description of the interview, the following topics were addressed: parents' professional data, perception of shift work, other working schedule besides shift work, affected areas, retrospective evaluation, and suggestions for measures in the company itself. Finally, they were also asked whether they wished to add any further information.

Procedure

The present study was approved by the Ethics Committee of University of Minho (CE.CSH 095/2018). The study was disseminated on Facebook groups of different years of the Psychology course of the University of Minho as well as 'snowball' technique. The sample inclusion criterion was to have at least one of the parents working in shifts. A time was scheduled with the participants for the interview, which was held in a room reserved for this purpose at School of Psychology of University of Minho. First of all, informed consent was given to the participants in order to reinforce the anonymity and confidentiality of the data. The informed consent also revealed that the interview would be recorded in audio format, and after the analysis of the transcripts, the files would be deleted. The data collection procedure started with the participant answering the sociodemographic questionnaire followed by the interview. All the interviews were fully recorded that lasted on the average 20 minutes. The number of interviews conducted was stipulated according to the theoretical saturation of the data. Considering this criterion, 19 interviews were conducted.

Data analysis

Template analysis (King, 2004) was used for the analysis of the interviews data. According to the author, this technique consists of the codification of themes that the researcher considers important for his research and organizing them in a hierarchical structure in order to represent the existing relations between them. Some of these themes are usually pre-defined, but new themes can be removed or introduced during the analysis of the interviews (King, 2004). In the development of the template, the following steps

suggested by King and Brooks (2016) were considered: a) familiarization with the data; b) codification of the pre-defined themes; c) data coding; d) construction of the initial template ; e) application of the template to the remaining data and its development; f) application of the final template; g) interpretation of the template. King (2004) also mentioned that the template may have the levels of coding that researchers find beneficial for a better understanding of the template, and there is not only one possible way of presenting the data. However, direct quotes from participants should be used to favor the interpretation of the results, a strategy that was also followed in our case.

Results and discussion

Table 2 shows the themes included in the initial template.

Table 2. Initial template for interviews with shift workers' children

Initial Template
1. Perception of shift work
2. Another working schedule besides shift work
3. Areas that would change if the parent did not work in shifts
4. Retrospective evaluation
5. Measures in the organization itself

Source: The authors.

Table 3 presents the final template of the theme 'Perception of shift work impact' (1). Table 4 displays the final template of the themes 'Another working schedule besides shift work' (2), 'Retrospective evaluation' (3), and 'Measures in the organization' (4). Next, the interpretation of results of the final template is presented. Following the suggestion mentioned above by King (2004), citations from the interviews are also presented in order to illustrate such results, which are identified with P (participant), followed by the respective number from 1 to 19.

Table 3. Final Template of the theme 'Perception of shift work impact'
Final Template

1. Perception of shift work impact
1.1. <u>Perception of positive impact</u>
1.1.1. Economic increase
1.1.2. Time reorganization
1.1.2.1. Possibility of exchange/adjustment of specific needs
1.1.2.2. Compatibility with other activities
1.1.3. Less tiring
1.1.4. Less workload
1.1.5. School support
1.1.6. Occasional activities
1.2. <u>Perception of negative impact</u>
1.2.1. Not being able to plan activities together in advance
1.2.2. Social isolation
1.2.3. Disruption of biological rhythms
1.2.4. The exit time depends on co-workers
1.2.5. More tiring
1.2.6. Family time
1.2.6.1. Birthdays
1.2.6.2. Festive seasons
1.2.6.3. Dinners
1.2.6.4. Domestic life
1.2.6.5. Family activities
1.2.7. School support
1.2.8. Parental education
1.2.9. Regular activities
1.2.10. Occasional activities
1.2.11. Communication
1.3. <u>No perceived impact</u>
1.3.1. Family time
1.3.2. School support
1.3.3. Parental education
1.3.4. Regular activities
1.3.5. Occasional activities
1.3.6. Communication

Source: The authors.

The answers to the first theme, 'Perception of shift work impact' (1), made it possible to identify three different perspectives; perception of positive impact (1.1), perception of negative impact (1.2), and no perception of impact in the explored areas (1.3). Within the sub-theme perception of positive impact, economic increase and temporal reorganization were mentioned. The interviewees highlighted the possibility of changing shifts according to some specific need "[...] sometimes, I needed to go to a medical appointment. She would ask someone to change shifts with her and would come with me [...]" (P11) and the compatibility with other activities, such as going to public services "Yes, especially while going to the post office or something; if she worked from 9 to 5, or from 9 to 6, maybe it would have not been so easy [...]" (P9). Still within this sub-theme, some of the interviewees considered that working in shifts was less tiring for the worker "[...] I think she is less psychologically and physically exhausted working in shifts than if she worked from 9 to 6 [...]" (P15), and there is less workload during the night shift "It's like, in terms of workload, it's less; at night, everyone is basically sleeping, and she has little to do [...]" (P18). Some participants were of the opinion that there was a positive impact of shift work on school support and occasional activities "[...] sometimes, I needed to go to some appointment. She would ask someone to switch shifts with her and would come with me. So, I think it would even give more advantages to continue in shifts" (P11). Some of these positive impacts, such as the economic increase and the temporal reorganization, support the existing literature when it comes to the advantages of shift work (e.g., Strazdins et al., 2006). The study by West et al. (2012) involving nurses also corroborates some of the advantages mentioned by the interviewees; it is less tiring for parents to work in shifts. In some professions, nursing for example, the tasks performed in the morning shift tend to require greater physical effort from the professionals. Thus, as one of the interviewees in this study referred, working in shifts turns out to be more advantageous and less tiring for these workers as they are not always doing the same shift. This interpretation was taken in the health context and is appropriate when there is asymmetry in the workload between different shifts, but not when the workload is the same (for example, in an industry where production conditions tend to be more homogeneous). Regarding the positive impacts perceived by the participants in the occasional activities, a possible explanation may be the flexibility that exists in some organizations in exchanging shifts with colleagues at the occasion of some exceptional need (e.g., going to the doctor with the child). This explanation can also be applied, in part, to the school support since many participants mentioned that the parents went to school reunions because they were able to exchange shifts with their colleagues. On the other hand, depending on the work shift, parents can be at home when their children return from school, and thus be able to help them with their homework.

In the sub-theme 'Perception of negative impact' (1.2), the participants emphasized the fact that they cannot plan activities together in advance, because they don't know the schedule that the parent who works in shifts will have "[...] afterall, it is never fix. She knows the schedule for the month, but then there are exchanges too. We cannot plan much ahead. We only have that time of that month" (P9). Participants also mentioned about the social isolation of the shift worker, the disruption of biological rhythms, especially at night, and the fact that the exit time is dependent on co-workers, since in this type of schedule, the worker cannot leave work till the colleague of the next shift arrives. Some of the interviewees also mentioned that working in shifts is more tiring for the worker "[...] she always looks tired [...]". Once she even fainted in an afternoon out of fatigue when she was working, because she has not slept that night [...]" (P18). The participants also considered that the parents working in shifts have a negative impact on their family time, namely birthdays, festive seasons,

dinners, and domestic life “Well, sometimes she isn't there either, especially at Christmases” (P10); “The house would be cleaner and less out of control than it is now” (P13), family activities “[...] I think we could, I don't know, go out more on Saturdays, and go out for dinner, which is very rare because my mother is never there” (P7), school support “Yes, especially at the support level, although I knew that if he were at home, he could help me. Also, I didn't want to bother him or ask something because I knew he was tired [...]” (P12), parental education, regular activities “Yes, usually yes. As most games are on the weekend, and they work on the weekend, so they are unable to go see the game [...]” (P16), occasional activities “Now that he lost, for example I played an instrument, he missed the auditions, and concerts; he could not go to that [...]” (P8), and communication between the participant and the shift worker “Yes, it is an obstacle because many times you want to tell something and it's not possible” (P4). Some of these negative impacts can be comprehended by the fact that family and social life are generally organized according to the working schedule of the parents. Since most of the population works on a daytime schedule, it is obvious that family and social activities are synchronized with this type of schedule, which coincides with the working hours of shift workers (Silva & Bastos, 2018). In fact, several studies mentioned the negative impacts of shift work. The study by Silva et al. (2014) indicated negative impacts on health and social and family life. The study by La Valle et al. (2002) testified the existence of negative impacts on family time, school support, and the monitoring of children's extracurricular activities. The study by Sizane and Van Rensburg (2011) identified differences in communication between shift working mothers and their teenage children. The results of the present study are congruent with the cited literature.

However, regarding the sub-theme ‘No perception of impact’ (1.3), we also found data supporting the fact that there may not be any type of impact on the areas evaluated (family time, school support, parental education, regular activities, occasional activities, and communication). In all areas, different participants reported not feeling any kind of impact with regards to the parent's shift work. For example, in parental education, one of the participants mentioned “No because, even with him having this schedule, he has rules and we have to follow them” (P8). Regarding the occasional activities, one of the participants mentioned “[...] I've played saxophone, and whenever there were auditions and concerts, he always went. I don't remember any occasion that he failed” (P14). One of the possible reasons for this result may be related to the perceived organizational support. In fact, the participants mentioned several situations, wherein the parents exchanged shifts with their co-workers in order to attend activities such as ‘school reunions’ or ‘children's concerts/dance performances’. Beyond this flexibility in exchanged shifts, there are several management practices that can be implemented in organizations in order to help overcome adaptation difficulties to the shift work. For example, a study conducted in the Portuguese context, involving five textile companies, explored strategies used in these organizations that could influence adaptation to shift work. The authors identified some practices, such as providing transport between home and the organization for morning shift workers, and greater economic compensation for workers on the afternoon shift with rotating days off during the week as a way of increasing the attraction and retention of people in that shift or even allowing workers to choose the work shift when they are admitted (Silva & Prata, 2015). The possibility of choosing the work shift also seems to be associated to better acceptance and adaptation to change by the shift workers (Barton, 1994). Carneiro and Silva (2015), in a study conducted in the hospital context, found that organizational support was positively related to the reconciliation of life outside the organization and satisfaction with working schedule.

In our study, the participants also mentioned (mainly those parents who have been working in shifts for several years) that they are already accustomed to this type of schedules, so they do not feel any impact.

Table 4. Final Template of the themes ‘Another working schedule beyond shift work’, ‘Retrospective evaluation’, and ‘Measures in the organization itself’

Final Template
1. Another working schedule besides shift work
1.1. <u>Standard working hour</u>
1.1.1. Compatible with children’s schedule
1.1.2. Allows greater rest
1.2. <u>Morning shift</u>
1.2.1. Compatible with children’s schedule
1.2.2. Allows greater rest
2. Retrospective evaluation
2.1. Higher impact when younger
2.2. Higher impact today
2.3. Higher impact regardless of age
3. Measures in the organization itself
3.1. <u>Suggestions of measures to implement</u>
3.1.1. Better shift system organization
3.1.2. Salary increase
3.2. <u>Measures already implemented that participants consider positive</u>
3.2.1. Shift system organization
3.2.2. Working schedule management practices
3.2.2.1. Possibility of choosing the shift
3.2.2.2. Exchange the work day on the eve of a holiday

Source: The authors.

In the second theme of the interview, ‘Another working schedule besides shift work’ (2), the interviewees specified the standard working hour and the morning shift (2.1). According to interviewees, the reasons behind these two choices were that these schedules would allow the worker to rest more “There might be a schedule where he could have more

time to rest because he doesn't have much. Perhaps, the normal schedule maybe from 9 to 5 [...]” (P8) and would be more compatible with their own (children) schedules “Because she leaves at the same time as we are at home, and also arrives at the same time. So, we could also be there some time before dinner and make dinner and be together” (P9).

The answers to the third theme, ‘Retrospective Evaluation’ (3), allowed us to identify three perceptions: those who considered that the parent working in shifts had a greater impact (in the areas previously explored) when they were younger “I think now I feel less but I have more sense of this absence. Nonetheless, now I don't feel so much, and now it's easier too if I want to go to him” (P12), those who feel a greater impact today, and those who considered that the impact they felt when they were younger is the same as they currently feel:

I think it's the same. When I was younger [...], I missed her in the sense of spending little time with her, but now being more independent, I also realize how I still live with my parents, being at home sometimes 2 days and only seeing her for 2 hours [...] (P10).

Finally, the answers to the last theme, ‘Measures in the organization’ (4), led to the division of two positions. The first group (4.1) suggested some measures that each organization could implement in order to minimize the negative effects of working in shifts. Some examples of that include improving the organization of the shift system, such as not working on Sunday or always having the same shift on each day of the week “They still have the rotating schedule, but it would be the same throughout the week; for example, on Monday, only work in the morning. On Tuesday, no work in the afternoon, and only work at night” (P10), and the increase in salary.

In the second group (4.2), the interviewees spoke about some measures that they considered positive. These measures have already been implemented in the organizations, such as the organization of the shift system and the management practices of working hours. Within this last measure, the interviewees mentioned the possibility of choosing the shift and the possibility of exchanging the work day on holiday as positive impact “[...] for example, Tuesday is a holiday. They do not work Monday night to be able to spend Tuesday with family and work Tuesday night [...]” (P2).

These measures remind us of the importance of organizational support in the management of working hours in general and shift working hours in particular.

Final considerations

The main objective of this study was to understand the impacts of shift work in the family and social sphere, giving due consideration to the perspective of the children of shift workers. In general, the results point to the fact that the interviewees perceived shift work as having positive, negative and no impact on these spheres.

While interpreting the results of this study, some limitations must be considered. One of them is the non-standardization of the working schedule of shift workers. Different work shifts are associated to different positive and negative impacts. In order to control this limitation, it is suggested that future studies be carried out involving the children of shift workers who have the same schedule. Working in three rotating shifts (morning, afternoon, night) would be the ideal schedule since it is the most demanding, not only from a biological point of view (since it implies the inversion of the sleep-wake cycle during the night shift) but

also from the social aspect (since it implies working at the weekend, a period highly valued from the family and social point of view). The second limitation is the fact that almost all the participants are university students, therefore some of them are studying in a city different from their home town. It means that during the school period, they are not living with their parents, thus they may not feel any impact of the parent's shift work on their daily lives. Therefore, for the future studies, it is suggested that the sample should consist of children of shift workers who are cohabiting with the parent who works in shifts. In summary, given the scarcity of studies that integrate the perspective of the children of shift workers, it is suggested that more research be carried out on the subject overcoming the limitations mentioned above.

In addition to the aspects mentioned above, future studies on the subject may: i) compare the perspective of shift workers' children with the perspective of day workers' children about the impact of shift work on family and social life, and ii) compare the perspective of shift workers' children with the shift workers' perspective in family and social life.

References

- Barnett, R. C., & Gareis, K. C. (2007). Shift work, parenting behaviors, and children's socioemotional well-being: a within-family study. *Journal of Family Issues*, 28(6), 727-748. doi:10.1177/0192513X06298737
- Barton, J. (1994). Choosing to work at night: a moderating influence on individual tolerance to shift work. *Journal of Applied Psychology*, 79(3), 449-454. doi:10.1037/0021-9010.79.3.449
- Barton, J., Aldridge, J., & Smith, P. (1998). The emotional impact of shift work on the children of shift workers. *Scandinavian Journal of Work, Environment & Health*, 24(3), 146-150.
- Bihan, B. L., & Martin, C. (2004). Atypical working hours: consequences for childcare arrangements. *Social Policy & Administration*, 38(6), 565-590. doi:10.1111/j.1467-9515.2004.00408.x
- Carneiro, L., & Silva, I. (2015). Trabalho por turnos e suporte do contexto organizacional: um estudo num centro hospitalar. *International Journal on Working Conditions*, 9, 142-160.
- Decreto-lei nº 7, de 12 de fevereiro de 2009. *Diário da República*, Lisboa, n. 30/2009, I Série.
- Eurostat. (2020). Employees working shifts as a percentage of the total of employees, by sex and age (%). Recuperado de: https://ec.europa.eu/eurostat/web/products-datasets/-/lfsa_ewpshi
- Jensen, H. I., Larsen, J. W., & Thomsen, T. D. (2018). The impact of shift work on intensive care nurses' lives outside work: a cross-sectional study. *Journal of clinical nursing*, 27(3-4), 703-709. doi:10.1111/jocn.14197

- King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (p. 256-270). Londres, UK: Sage.
- King, N., & Brooks, J. M. (2016). *Template analysis for business and management students*. Londres, UK: Sage.
- La Valle, I., Arthur, S., Millward, C., Scott, J., & Clayden, M. (2002). Happy families? Atypical work and its influence on family life. Bristol, UK: Joseph Rowntree Foundation.
- Li, J., Johnson, S. E., Han, W.-J., Andrews, S., Kendall, G., Strazdins, L., & Dockery, A. (2014). Parents' nonstandard work schedules and child well-being: a critical review of the literature. *The Journal of Primary Prevention*, 35(1), 53-73. doi:10.1007/s10935-013-0318-z
- Lindsay, J., & Maher, J. (2014). The intersections of work time and care time: nurses' and builders' family time economies. *Work, Employment and Society*, 28(2), 189-205. doi:10.1177/0950017013490331
- Matheson, A., O'Brien, L., & Reid, J. A. (2014). The impact of shiftwork on health: a literature review. *Journal of Clinical Nursing*, 23(23-24), 3309-3320. doi:10.1111/jocn.12524
- Mills, M., & Täht, K. (2010). Nonstandard work schedules and partnership quality: quantitative and qualitative findings. *Journal of Marriage and Family*, 72(4), 860-875. doi:10.1111/j.1741-3737.2010.00735.x
- Mott, P. M., Mann, F. C., McLoughlin, Q., & Warwick, D. P. (1965). *Shift work: the social, psychological and physical consequences*. Ann Arbor, MI: The University of Michigan Press.
- Oláh, L. S., Kotowska, I. E., & Richter, R. (2018). The new roles of men and women and implications for families and societies. In G. Doblhammer & J. Gumà (Eds.), *A demographic perspective on gender, family and health in Europe* (p. 41-64). Cham, CH: Cham Springer.
- Pordata. (2020). População empregada: total e por sexo. Recuperado de: <https://www.pordata.pt/Portugal/Popula%C3%A7%C3%A3o+empregada+total+e+por+sexo-30>
- Presser, H. B. (2003). *Working in a 24/7 economy: challenges for american families*. New York, NY: Russell Sage Foundation.
- Silva, I. S., & Bastos, R. (2018). Shift work – change from semi-continuous to continuous system. *Journal of Organizational Change Management*, 31(7), 1461-1470. Doi: 10.1108/JOCM-11-2017-0431
- Silva, I. S., & Prata, J. (2015). Working schedules and human resource management: The case of shift work. In C. Machado & J. P. Davim (Eds.), *Human resource management challenges and changes* (p. 65-93). New York, NY: Nova Science Publishers.

- Silva, I. S., Prata, J., & Ferreira, A. I. (2014). Horários de trabalho por turnos: da avaliação dos efeitos às possibilidades de intervenção. *International Journal on Working Conditions*, 7, 68-83.
- Sizane, N. F., & Van Rensburg, E. (2011). Night shift working mothers: mutual perceptions with adolescent children. *Journal of Psychology in Africa*, 21(1), 71-78. doi:10.1080/14330237.2011.10820431
- Strazdins, L., Clements, M. S., Korda, R. J., Broom, D. H., & D'Souza, R. M. (2006). Unsociable work? Nonstandard work schedules, family relationships, and children's well-being. *Journal of Marriage and Family*, 68(2), 394-410. Doi:10.1111/j.1741-3737.2006.00260.x
- Strazdins, L., Korda, R. J., Lim, L. L., Broom, D. H., & D'Souza, R. M. (2004). Around-the-clock: parent work schedules and children's well-being in a 24-h economy. *Social Science & Medicine*, 59(7), 1517-1527. Doi:10.1016/j.socscimed.2004.01.022
- Tai, S. Y., Lin, P. C., Chen, Y. M., Hung, H. C., Pan, C. H., Pan, S. M., ... & Wu, M. T. (2014). Effects of marital status and shift work on family function among registered nurses. *Industrial Health*, 52(4), 296-303. doi:10.2486/indhealth.2014-0009
- Tausig, M., & Fenwick, R. (2001). Unbinding time: alternate work schedules and work-life balance. *Journal of Family and Economic Issues*, 22(2), 101-119. doi:10.1023/A:1016626028720
- West, S., Mapedzahama, V., Ahern, M., & Rudge, T. (2012). Rethinking shiftwork: mid-life nurses making it work. *Nursing Inquiry*, 19(2), 177-187. Doi:10.1111/j.1440-1800.2011.00552.x
- Winkler, M. R., Mason, S., Laska, M. N., Christoph, M. J., & Neumark-Sztainer, D. (2018). Does non-standard work mean non-standard health? Exploring links between non-standard work schedules, health behavior, and well-being. *SSM-population Health*, 4, 135-143. Doi:10.1016/j.ssmph.2017.12.003
- White, L., & Keith, B. (1990). The effect of shift work on the quality and stability of marital relations. *Journal of Marriage and the Family*, 52(2), 453-462. doi:10.2307/353039

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Soraia Gonçalves: Soraia Gonçalves has a Master in Psychology from University of Minho. Currently performing the junior professional year in a sports organization.

Isabel Silva: Isabel Silva has a doctorate in Work and Organizational Psychology by University of Minho, where she works as a teacher. The theme of shift work schedules has been one of her main research interests and she has several publications in this field.

Ana Veloso: Ana Veloso holds a PhD in Psychology of Organizations from the University of Minho. She is currently an Assistant Professor at the School of Psychology at the University of Minho. Her research interests focus on the following topics: employment relationship, creativity and innovation, and knowledge transfer.