Aging, work and technology: application driver as a laboral possibility for the 50+ population

Envelhecimento, trabalho e tecnologia: motorista de aplicativos como possibilidade laboral para a população 50+¹

Luana de Barros¹, Taiuani Marquine Raymundo¹

¹Universidade Federal do Paraná – UFPR, Curitiba, PR, Brasil.


Abstract

Introduction: The demographic transition in Brazil has led individuals over 50 years old to remain involved in labor activities for a longer time. Concomitantly, there is the appearance of the “gig” economy, characterized by the provision of services, through online platforms or mobile applications, as in the case of transport applications. Such changes in the work context can bring challenges and experiences, positive and negative to the worker. In this sense, the role of the occupational therapist stands out as the professional who can support older adults and elderly people in the search for and involvement in everyday occupations modified by technology and impacted by crises in the economy. Objective: to analyze the motivation and perception of workers aged 50 or over about working with mobile transport apps. Method: a study with a qualitative, transversal, exploratory, and descriptive approach. Participants were recruited by invitation from social networking groups of mobile transport application workers and by referral. For data collection, a socioeconomic questionnaire and an interview were analyzed using Bardin’s Content Analysis. Results: The participants were ten drivers, aged between 50 and 63 years old, in which the main motivation for working with applications was due to be unemployed in the period of the Brazilian economic crisis and found it difficult to gain replacement in the job market due to the preference for young people. The main negative aspect listed by the drivers was insecurity, and as a positive aspect, the flexibility of working hours and the importance of involvement in work activities for the construction of identity. Conclusion: During the changes in the population’s age profile and in the ways of working, it is necessary to develop more analyzes on aging, work, and technology aimed at the practice of Occupational Therapy.

¹The paper is part of the research for the Course Conclusion Work of the first author. We followed the current ethical procedures. The study was approved, on 12/05/2018, by the Research Ethics Committee of the Federal University of Paraná under opinion No. 3,058,761.
Keywords: Aging, Employment, Work, Technology, Mobile Applications, Occupational Therapy.

Resumo

Introdução: A transição demográfica no Brasil tem levado indivíduos com mais de 50 anos a permanecer por mais tempo envolvidos em atividades laborais. Concomitantemente, nota-se o surgimento da chamada economia “gig”, caracterizada pela oferta de serviços, por meio de plataformas online ou aplicativos móveis, como o caso dos aplicativos de transporte. Tais mudanças no contexto laboral podem acarretar desafios e vivências, positivas e negativas ao trabalhador. Nessa direção, destaca-se o papel do terapeuta ocupacional como o profissional que pode apoiar adultos mais velhos e idosos na busca e no envolvimento em ocupações cotidianas modificadas pela tecnologia e impactadas por crises na economia. Objetivo: Analisar a motivação e a percepção de trabalhadores com 50 anos ou mais acerca do trabalho com aplicativos móveis de transporte. Método: Estudo com abordagem qualitativa, transversal, exploratório e descritivo. Os participantes foram recrutados por meio de convite em grupos de redes sociais formados por trabalhadores de aplicativos móveis de transporte e por indicação. Para coleta de dados, utilizou-se questionário socioeconômico e entrevista analisada por meio da Análise de Temática de Conteúdo. Resultados: Participaram 10 motoristas, com idade entre 50 e 63 anos, que apontaram como principal motivação para o trabalho com aplicativos o fato de estarem desempregados no período da crise econômica brasileira e terem encontrado dificuldade de conquistar recolocação no mercado de trabalho devido à preferência por pessoas mais jovens. O principal aspecto negativo elencado pelos motoristas foi a insegurança e como aspecto positivo foi citada a flexibilidade de horário e a importância do envolvimento em atividades laborais para a construção da identidade. Conclusão: Em meio às alterações no perfil etário populacional e nos modos de trabalho, é necessário o desenvolvimento de novos estudos que relacionem envelhecimento, trabalho e tecnologia visando à prática da terapia ocupacional.

Palavras-chave: Envelhecimento, Emprego, Trabalho, Tecnologia, Aplicativos Móveis, Terapia Ocupacional.

Introduction

Brazil has experienced an increasing population aging related to the fall in fertility rates and the increase in life expectancy. As a result, the country deals with the challenges and the search for a more adequate social security system which, in a direct and simple analysis, has implied and will continue to imply the need for individuals to work for a longer period (Camarano & Fernandes, 2016).

With the pension reform approved – minimum age of 62 for women and 65 for men - the participation of workers over 50 in the labor market will increase even more (Lopes & Burgardt, 2013; Muniz & Barros, 2014; Costanzi & Ansilio, 2017; Brasil, 2019). Data from 2016 already indicated the growing participation of older people in the labor market (Working Age Population (WAP), Economically Active Population (EAP) and Employed). Through
WAP, we verified the increase in the participation of people aged 50 years old or older between 2003 and 2015. Also, in the data referring to the EAP and the Employed, this same age group grew close to 25% of total statistics (Amorim et al., 2016).

Despite these data, staying in the labor market for a longer time is very challenging, as society tends to shape the functioning of institutions and the physical and social environment, focusing on the work of young people since there is still an understanding that the proximity to old age is synonymous with loss of power for work activities (Beier, 2015; Czaja et al., 2015; Berde & Tokés, 2019).

Concomitantly, the destruction of a very high number of jobs during the Brazilian crisis that started in 2014 boosted the search for involvement in informal labor activities. These factors may be making the relationship of individuals aged 50 years old and over and the job market even more complex (Correia, 2016; Rossi & Gimenez, 2017).

As an example, we can observe the demand for informal jobs is the increased performance of older workers in alternative work arrangements (temporary workers, freelancers, daily workers, and outsourced workers). In the United States, for example, 6.4% of employees in alternative jobs in 2015 were between 16 and 24 years old, 14.3% between 25 and 54 years old, and 23.9% between 55 and 74 years old. About a third of workers who reported working through an intermediary said that the intermediary is online (mobile transport apps like Uber, for example) (Katz & Krueger, 2019).

The reconfiguration in the ways of working has been accompanied by the greater insertion of technology in work activities, especially due to the advance of the internet. An example of this is the emergence of the “gig economy”, a word that arose from slang terms used to represent freelance work that unites temporary workers with no employment relationship with companies interested in this population (Faustini, 2015; Sundararajan, 2015; Mena, 2016). The “gig” job offers services that use online platforms or mobile applications and user-based information systems with flexible hours. Such platforms mediate between employer and worker, and this worker is responsible for providing the necessary tools to carry out the task, as in the mobile transport applications and delivery applications (Tran & Sokas, 2017; Berde & Tokés, 2019).

In this sense, despite the scarcity of scientific literature showing the age involvement in work activities through technology, we observe growing dissemination of news, on major websites and newspapers (AARP, Forbes, The New York Times, CNBC, Estadão), related to individuals over 50 years old who have remained active in the labor market through the “gig” economy, using mobile transport applications. Among the justifications, we can see the possibility of socializing, keeping busy and the search to complement the value of retirement with a flexible workload (Olson, 2016; Jefferson, 2017).

These aspects refer to occupational beings who perform different activities, with the purpose of Occupational Therapy as they search for involvement in daily occupations capable of promoting evolutionary, productive, creative, playful, and expressive individuals. The study of the relationship between health and human activity is a specific contribution of this profession (Caniglia, 1994; American Occupational Therapy Association, 2020). Therefore, we need to understand how the older individuals relate to work and technology, and what are the barriers and facilitators of this relationship to create subsidies for the development of action strategies in the area.

Thus, this research aims to analyze the motivation and perception of drivers of mobile transport applications aged 50 or over about their work.
Method

This is a study with a qualitative, transversal, exploratory, and descriptive approach, approved on December 5, 2018, by the Research Ethics Committee of the Federal University of Paraná (UFPR), under opinion number 3,058,761. The inclusion criteria for participation in this research were: being 50 years old or older; being a driver for mobile transportation apps; having performed a minimum of 50 rides (according to the authors, the rides show the experience in the activity); live and work in Curitiba and/or metropolitan region and signing the Informed Consent Form.

The researchers invited the participants in the research in groups of social networks formed by workers of mobile transport applications and by indication of some participants.

For the characterization of the sample, we applied a socioeconomic questionnaire composed of closed, open, and semi-open questions related to aspects of personal life and work activities.

As a result, we used a semi-structured interview with the consent of the participants to record and transcribe them in full, for later analysis. The questions asked of workers addressed issues such as the reasons that led them to choose mobile transport applications as a work activity, reasons that led them to stay or return to the labor market, possible difficulties and facilities for using Information and Communication Technologies (ICT) for work performance, positive and negative perceptions of working with transportation applications and satisfaction with the activity they perform. For data analysis, we used the thematic content analysis (AC) technique (Bardin, 2011).

Results and Discussion

Sample characterization

Ten workers participated in the study (seven men and three women), aged between 50 and 63 years old and an average of 54.5 years old (SD = 4.9). Five of them were married, nine had at least completed high school and six had a total family income of up to six minimum wages (Table 1).

Among the interviewees, there was a variety in the areas they worked on before to the mobile transport apps and at the time of the interview, only one driver had other work activity in addition to the apps. Half of the survey participants (N = 5) considered the work performed through the applications to be permanent. The others (N = 5) reported aiming to be involved in formal activities, approval in public tenders, or setting up their own business, even considering that they remain linked to mobile applications, associating two work activities (Table 2). The time of connection with mobile transport application platforms varied from 3 to 36 months, and most drivers used two different applications (Table 2).

In the workload performed by the interviewed drivers, seven of them maintained a workload of more than 40 hours, and six of them could reach (and exceed) 60 hours per week (Table 2). It is worth mentioning that Decree-Law No. 5452, of May 1, 1943, approved the Consolidation of Labor Laws and established that the normal working hours for employees of private companies must not exceed eight hours a day when no other limit (Brasil, 1943). Therefore, the standard workday in Brazil is between 40 and
44 hours per week (Krein et al., 2018). However, we perceived that the individuals who do not have a fixed income and the participants in this study (Table 3), there is a tendency to work many hours a day since the longer their working hours, the greater the possibility of income (Bernardino & Andrade, 2015). Similar results were found in a research of drivers in an application in London in which they work for approximately 40 hours a week. However, the average working day in that city is less than this number (Berger et al., 2018).

Table 1. Socioeconomic characteristics of the participants (N=10).

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3</td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>5</td>
</tr>
<tr>
<td>Divorced</td>
<td>2</td>
</tr>
<tr>
<td>Common-law marriage</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education level</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete high school</td>
<td>1</td>
</tr>
<tr>
<td>Complete high school</td>
<td>5</td>
</tr>
<tr>
<td>Incomplete higher education</td>
<td>2</td>
</tr>
<tr>
<td>Complete higher education</td>
<td>1</td>
</tr>
<tr>
<td>Post-Graduation</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Family income</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>From 1 to 3 minimum wages</td>
<td>3</td>
</tr>
<tr>
<td>From 4 to 6 minimum wages</td>
<td>3</td>
</tr>
<tr>
<td>From 7 to 10 minimum wages</td>
<td>2</td>
</tr>
<tr>
<td>From 10 to 15 minimum wages</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2. Characteristics of workers and work with transportation applications.

<table>
<thead>
<tr>
<th>Activity/work area before the application</th>
<th>Retired</th>
<th>Other work besides the applications</th>
<th>Applications: Temporary/permanent Work</th>
<th>Working time with the applications</th>
<th>Application s they work</th>
<th>Weekly workload with the applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchant</td>
<td>No</td>
<td>No</td>
<td>Temporary</td>
<td>18 months</td>
<td>2</td>
<td>48 hours from Monday to Sunday</td>
</tr>
<tr>
<td>Driver</td>
<td>Yes</td>
<td>No</td>
<td>Permanent</td>
<td>14 months</td>
<td>3</td>
<td>40 hours Monday to Friday</td>
</tr>
<tr>
<td>Systems Analyst</td>
<td>No</td>
<td>No</td>
<td>Permanent</td>
<td>36 months</td>
<td>2</td>
<td>60 hours Monday to Friday</td>
</tr>
<tr>
<td>Salesman</td>
<td>No</td>
<td>No</td>
<td>Temporary</td>
<td>22 months</td>
<td>2</td>
<td>60 hours from Monday to Sunday</td>
</tr>
<tr>
<td>Logistics</td>
<td>Yes</td>
<td>No</td>
<td>Permanent</td>
<td>28 months</td>
<td>2</td>
<td>80 hours from Monday to Sunday</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>No</td>
<td>No</td>
<td>Temporary</td>
<td>28 months</td>
<td>3</td>
<td>60 hours in six non-fixed days a week</td>
</tr>
<tr>
<td>Microentrepreneur</td>
<td>No</td>
<td>Yes</td>
<td>Temporary</td>
<td>33 months</td>
<td>3</td>
<td>8 hours on non-fixed days in the week</td>
</tr>
<tr>
<td>Network infrastructure</td>
<td>No</td>
<td>No</td>
<td>Temporary</td>
<td>26 months</td>
<td>2</td>
<td>40 to 60 hours from Monday to Sunday</td>
</tr>
<tr>
<td>Driver</td>
<td>Yes</td>
<td>No</td>
<td>Permanent</td>
<td>3 months</td>
<td>1</td>
<td>40 hours Monday to Friday</td>
</tr>
<tr>
<td>Researcher</td>
<td>No</td>
<td>No</td>
<td>Permanent</td>
<td>30 months</td>
<td>2</td>
<td>60 hours from Tuesday to Sunday</td>
</tr>
</tbody>
</table>
Categorization and presentation of interviews

We collected the perceptions and motivations of the participants of this study in the work performed as drivers of mobile transport applications through interviews, valuing interaction, and the stimulation of dialogue between the interviewer and the participants.

After transcription and a floating reading, we grouped the results of the interviews into two main themes - the worker and the work, divided into different thematic categories and their respective subcategories, shown in Table 3.

Table 3. Categorization of interviews.

<table>
<thead>
<tr>
<th>Theme</th>
<th>CATEGORY</th>
<th>SUBCATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation to work with applications</td>
<td>Unemployment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brazilian economic crisis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stay active</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>Challenges</td>
<td>Ageism</td>
<td></td>
</tr>
<tr>
<td>Negative impact of age at work with apps</td>
<td>Physical/cognitive ability</td>
<td></td>
</tr>
<tr>
<td>Difficulties</td>
<td>Technology</td>
<td></td>
</tr>
<tr>
<td>Positive impact of age at work with applications</td>
<td>Professional experience</td>
<td></td>
</tr>
<tr>
<td>Positive aspects of working with applications</td>
<td>Flexible hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interpersonal relationship</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remuneration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Driving pleasure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not having a boss/superior</td>
<td></td>
</tr>
<tr>
<td>Negative aspects of working with applications</td>
<td>Traffic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insecurity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Amount received for the rides</td>
<td></td>
</tr>
<tr>
<td></td>
<td>People</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tiredness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prejudice/concept</td>
<td></td>
</tr>
<tr>
<td>Temporary or permanent work</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**The worker**

When talking about the motivations that led drivers to start working with mobile transport applications, we observed the predominance of the fact that they were unemployed and found a way to earn income, represented by the following statements:

*Because I was unemployed… and I did it to try, I did it a week and I made some really good money, it was soon, you know, I said Oh it worth it.* (Driver 3).

*Because I had that at the time, it was what was easy. It was something that was emerging again, I started with the applications in February 2017, so it was something that was working well, exploding, it was easy to do it and it was what came up at the moment.* (Driver 8).

According to the participants, another motivating factor that led them to seek work with mobile transport applications was the Brazilian economic crisis, which began in mid-2014, identified as the biggest economic crisis of the country, with
the greatest acceleration in the unemployment rate in recent times. This fact can be exemplified by the 3.2 million people who could enter the labor market between December 2014 and December 2016 and who did not find opportunities since 2.6 million jobs were destroyed in that period. These figures add up to almost 6 million unemployed in just two years (Rossi & Gimenez, 2017).

Thus, in this scenario, when more than two million formal jobs were lost, there was an increase in the search for “self-employed” activities (Rossi & Gimenez, 2017), showing in Brazil, what the literature has called “gig” or “gig economy”. As already mentioned, this new business model consists of online platforms that connect individuals looking for a service (demand) directly to others who are available to provide this service (offer) (Kalleberg & Dunn, 2016; Todolí-Signes, 2017). Uber is an example of the sharp expansion of “gig” companies is Uber that at the end of 2014, coinciding with the economic crisis, had approximately 2 thousand employees and more than 160 thousand drivers using its platform, only in the United States (Tran & Sokas, 2017). At the same time, this company started its activities in Brazil and, in 2019, had more than 600,000 partner drivers in the country (Uber, 2019). We can observe this in the following statements:

*It was right around the time that I was fired… it was in 2014… it was right at that time; it was right at the beginning of the crisis. So, where did I send my resume, the friends I knew… “oh, it is just firing, it is just firing, it is just firing away” … it was a very long period, it had never happened before in Brazil, there was never a crisis like this so big. So, all the friends I called had that story, “here it is just firing” … there comes a time when you stop looking, this is what’s happening with a lot of Brazilians. (Driver 3).*

*One of the causes of my dismissal was precisely the crisis, a salary issue, not only me, but another colleague was also dismissed with me, precisely because of the salary issue. (Driver 8).*

On the other hand, the only driver to participate in the research that does not have his main job activity in transport applications since before the crisis was a microentrepreneur. He said that he started working with the applications due to a drop in his company’s income in the same period of economic crisis. This shows that the impact caused by the crisis to the employee is felt through the reduction of employment opportunities while the employer is perceived by the fall in the company’s profits (Rossi & Gimenez, 2017). This driver explained that:

*About three years ago, my company decreased the revenue, I lost a potential customer, that 60% of my company’s revenue was from that customer and I lost that customer. So, it was a big shock. So, what happened … I had a car financed, I always had a new car, I changed cars every year, I got a new car, a new and financed car. As I lost this customer, my sales dropped too much and I decided to sell the car. (Driver 7).*

*Other motivational factors strongly cited were the search for engaging in activities aimed at filling time and the income from this work. Berger et al. (2018)*
point out in their study the increase in the remuneration of application drivers when compared to their previous work activities and the interference of income in the perception of the subjective well-being of individuals. The following statements show the above:

*Occupation, right, so we don't spend a lot of time doing anything, with our heads unoccupied, right, and an extra income, to have a better quality of life.* (Driver 2).

*Honest money, good money ... nothing against the minimum wage, but working 10 hours a day to receive a minimum wage ... depending on the time you make one, four, five minimum wages, you can even get more.* (Driver 3).

*From three to four thousand reais net, excluding fuel ... I didn't earn it in a formal job, I didn't earn it, I earned around 1600, 1700, today I take more, today I take twice as much.* (Driver 9).

However, when searching for work, the participants of this study declared challenges related to their age:

*And today I realize that companies, including the one that fired me, they take, they are recruiting recent graduates to earn a low salary, even without experience and they teach everything, they prefer to teach everything than to have an employee over 50 years old, with experience, even with good experience, right, in the commercial area. So, it's a matter of their choice, right.* (Driver 4).

*I'm in this because I have no other option. After all, at my age, it is difficult to achieve anything else.* (Driver 6).

*A lot for my age, right. Companies, this is nothing negative for companies, I don't see it negatively, because companies need to be agile, they will not want an old IT professional, full of addictions and wanting to earn well. When I was going to do an interview, I had a salary proposal, considering my education and the experience I have, I was discarded immediately, they want newly graduated students, earning 1,500 per month, 1,200, they will not want to pay the salary that I had previously. This was one of the barriers that I found to put myself back in my area.* (Driver 8).

People over 50 years old end up with inequality in the offer of jobs since the job market tends to look for younger workers who have better education, speak another language, and make independent use of new technologies (Czaja et al., 2015). Also, the prejudice/concept is existing in society, when walking towards old age, the individual is distanced from the world of work and goes to the end of the productive cycle (Lopes & Burgardt, 2013; Paolini, 2016). Unfounded beliefs about the working capacity of older people converge on what is known as Ageism, which refers to stereotypes against individuals or groups based on age, present in...
different spheres of society, especially in the labor market, which contributes to social marginalization and exclusion (Andrés, 2017; Castro, 2015).

Even among companies considered in “Best Companies to Work For” evaluations, the concern for this group of workers is small. The approach for individuals over 50 in their Human Resources (HR) policies and practices are considerably smaller than companies that do not indicate any reference to the topic (Amorim et al., 2016).

Another issue addressed by drivers as a possible challenging factor was the relationship between their performance at work with the applications and their age. In this sense, only three drivers said that there are aspects to be listed: physical and cognitive:

The fact that I am 56 years old and doing this job, which is a job that requires attention all the time in traffic and on the cell phone because the cell phone is on the panel... so you are connected on the way, on the app, at the same time you have to pay attention to the passenger, you have to drive for yourself and the others... so it is complicated, it requires a lot of attention. (Driver 4).

Maybe if I wasn’t 53, maybe 30 or 40 years old, I would be doubling the job I’m doing, in eight hours I would jump to 16, 20 hours suddenly, you know, maybe the thought back there, but not today, today I am 53 years old, I don’t have that little bit of a boy anymore, the blood is still strong, you know. Not today, I am over 50, you know, today I feel pain, I even have tendinitis in both hands, but I do physical therapy for that, I have had knee surgery twice too. So I no longer have that edge. (Driver 9).

With the human aging process, the organism faces a series of changes resulting from the decline of cellular metabolism and the functioning of physiological systems, representing muscle, bone, joint changes, in the skin, in the sense organs, in the immune, endocrine-metabolic systems, cardiovascular, respiratory, genitourinary, gastrointestinal and hepatic. However, this does not necessarily result in compromised performance in Activities of Daily Living (ADL) (Bicalho & Cintra, 2013).

There is also a cognitive decline associated with age. In this sense, attention is an important component of cognition, involving processes that focus, select, sustain, and tends to change with the aging process, causing difficulty for the individual to focus or divide attention, for example, especially in activities with greater cognitive demand. However, the use of technological instruments in daily life causes positive impacts on cognitive components (Cosenza & Malloy-Diniz, 2013; Páscoa & Gil, 2017).

Some difficulty in the use of technology was mentioned, however, it was an easily resolved issue. More than half of the drivers cited the difficulty in using technology as a factor that does not imply any reduction in work performance, which is exemplified in the following statements:
As soon as I started, I thought it was rocket science to use the GPS, for example, it was complicated, but then I insisted, persisted, made a lot of mistakes, [...] because you have difficulty even in the configuration, tips, so there were a lot of boys and young girls in their 20s who realized that it was hard for me and helped me, there was a boy who took it and taught me how to use it, and some tips until today, I don’t forget the person, because I think it was cool, the person realized. I had this difficulty at the beginning, but the world is modernizing very fast, so either we follow up, find a way and go, or ... it can’t be closed there, typing, it doesn’t work anymore. We have to modernize hard; it was something I overcame, it was not easy, but I managed to overcome it. (Driver 1).

You see, it is very easy, but for the person of my age, who is close to 60, we have a certain resistance to technology. But then the children, the grandchildren ... thereafter the person starts to use it, there it is like a bicycle ... at first, it may be a little difficult for those of a certain age. But I see old people picking up and calling, updating. (Driver 3).

I don’t get used to the app. I just find it complicated when it comes to learning, but then I have no doubts. I try to update myself well, every day. (Driver 9).

In studies on aging, the idea that older individuals have greater difficulty in the use of technological devices is consensual, which can lead to digital exclusion. This can happen because, during the years of life, the individual may not have had experiences with the use of ICT (Information and Communication Technologies) (Páscoa & Gil, 2017). However, in this study, the drivers interviewed reported the ease of using the technology, associating it with the professional experience (positive impact of age at work with applications) acquired throughout their lives, since some of them performed previous functions linked to the use of technological devices:

I am a systems analyst, so it was easy for me, I have no difficulty at all. The experience I had in my life made it easier. (Driver 3).

I followed all the technology of the cell phones, the internet, the evolution of hardware, I worked with hardware and hardware is something that evolves very quickly, I followed this whole process. Cell phones are the same thing, 20 years ago it was a brick of this size, heavy, an antenna, it malfunctioned and only served to talk, today what we do less on cell phones is to talk. (Driver 8).

The work

When reporting their daily work, the participants listed some negative aspects of working with applications, and insecurity was the main one. This is due to the fear of drivers of not having access to much information about passengers, rides requested on behalf of other people, the need to carry money with them, the vulnerability of having strangers in their cars, and the ignorance of the destination’s location before accepting the ride. These aspects are expressed in the statements:
The app, I think, has a lot of good things but it also has many problems, for example, when you order a car you have our photo there, the license plate, the model of the car, you have the driver’s rating… but what do we have from the passenger? Name and rating, just… So, for us it is more complicated, I think they should give us more conditions than even for the passenger. More security because it is a very unsafe job. (Driver 2).

The negative issue of all this is the issue of security, even though the applications are committed to putting tools for this issue of security, I do not feel safe. (Driver 4).

Assault is a constant fear for people who work with apps, you are alone in your car working, day and night, always entering people you do not know, you are subject to assault at any time. And the fear is great, not only for me but for all drivers who work with applications. (Driver 8).

The feeling of lack of security was a negative factor also identified in the research developed by Silva (2018), in which 51.2% of the interviewed drivers claimed to believe that “the application” to which they were linked was not concerned with the safety of drivers. Another fact evidenced was about the driver’s confidence in checking the passenger record, in which only 2.4% of the drivers said they had full confidence.

The stress and tiredness caused by long hours in traffic were other negative aspects mentioned by the participants. There is also the misconduct of other drivers and passengers, as mentioned by some drivers:

I adapted too, but it gets stressful, there are days when I get tired a lot, my body feels. (Driver 1).

Just yesterday I didn’t go to work, I stayed at home all day, I had labyrinthitis, I woke up with absurd dizziness and all this caused by tiredness, a little fatigue, stress, accumulating a lot of function in traffic is not easy. This is a complicated factor. (Driver 4).

Oh, it’s hard for you to face this traffic today, right?! Because the traffic is getting more complicated every day. They are people in traffic that I think would not be able to be there. They screw up, they drive badly, you know?! And we are there all the time, you have to be aware. So, this is the difficult part. (Driver 2).

There is always that person in a bad mood, there is always a bad manner person, the people think that because they are paying for the ride they can do whatever they want in your car and that’s not how it works. (Driver 6).

We highlight the impact on health that the involvement in an exhausting activity with the maintenance of the same position and the excess of repetitive movements can cause to the worker, such as low back pain, neck pain, leg and knee pain, tendonitis, and physical tiredness, for example, and the depreciation of mental health, as pointed out in the study by Bernardino & Andrade (2015).

Another factor to be highlighted is the discrimination by passengers, family, and friends with application drivers. They do not consider the work activity a job. Despite
this, according to the interviewees, they seek to face the situation bearing in mind that they play an important role in today’s society raising financial resources in a dignified manner, as can be seen in the following statements:

What I notice is that like this ... some people ask too much: “Ah, do you only do apps?”, “Ah, do you have another job?”, “Are you retired?”. People want to know. And I say no. I left the company, they sent me away and I got this alternative form of work, I’m paying my bills, I’m earning relatively well. I just feel sorry for not having a thirteenth salary vacation, right, because I am not a contracted worker, but at least it is an honest source of income and I even invested in this car here. (Driver 4).

They ask “do you work or do you only do Uber?”. I start to laugh. I mean, no, I only do Uber. (Driver 6).

Apps are here to stay, it’s not a wave. They tried to end applications at the beginning of all forms and failed, the population uses it, incorporated it into their daily lives. Applications no longer leave the market, so some way for the application driver to be formalized, I do not say employment, but classification as a professional, this will have to happen. (Driver 8).

This difficulty in understanding application work as a job similar to any other may be related to the difficulty of classifying applications as formal or informal jobs. Because of this, there has been talking of classifying this work activity as a third category yet to be defined:

A new category, for sure. It is a change in the working relationship. On the one hand, there is no employment relationship, on the other hand, you have a certain boss, because if the passenger complains, you have an account to pay, if you don’t keep your car clean they exclude you from the app, so in a way, they are your boss. They receive the money, they make the transfer. It is not the people who receive the money and pass it on to them, it is the opposite. So, there is a lot of formal employment relationship and there are some things that are very characteristic of informality. (Driver 3).

You don’t sign anything, you don’t have any documents that create any link with them, you don’t have anything. You just send your documents to them and wait for them to release to ride, you don’t have any documents, you don’t have any signatures, neither yours nor theirs, it’s just a conversation, that’s how it works. Will I prove that I work for the company? Will the company prove that I provide them with service? (Driver 8).

When discussing the existence or not of an employment relationship between drivers and a particular transport application, Kramer (2017) points out that the activities developed through digital platforms such as the one studied here, created a business model that, in addition to being very profitable for its creators and managers, puts the regulation and relationships of the labor market at risk. This is because the worker offers his time, vehicle, knowledge, and workforce without guaranteeing any kind of labor rights, transforming the individual into a “self-entrepreneur”. This phenomenon, which has been called “Uberization”, is
associated with increased unemployment, entrepreneurship, changes in labor regulations, and technology innovations (Martins & Miranda, 2017; Krein et al., 2018).

In addition to the lack of access to labor rights, this type of activity is associated with very low wages when compared to long working hours (Bernardino & Andrade, 2015). In this sense, the participants listed the value of the ride as a negative aspect of working with transportation applications because it is considered to be below the expectations of most of the interviewed drivers. According to them, the value earned in the first months of operation of the application in Curitiba was higher than what can be added to the end of daily working hours today. They relate this drop in financial income to successive increases in the rate charged by applications, the value of fuel, which did not reflect the value of the rides, and the growing number of drivers.

However, even with all the negative aspects mentioned by the drivers who participated in the survey, they have an average of almost 24 months working with the transport applications. This is mainly due to the flexibility in the working hours that the applications allow, which was pointed out as a positive aspect. Despite this, it is valid to analyze the workload performed by them, which tends to be greater than 40 hours per week. According to the drivers’ speech, a larger workload is preferable that allows flexibility of schedules than a shorter workload with fixed hours:

*You make your schedule, work when you want, then you organize your work, if suddenly I cannot work during the day I will work during the night.* (Driver 1)

*But the good thing is that you have no time for you to do it. I stayed with the app for a year and a half and came back now, nobody questions, nobody asks. It is always available, if you stop for a month, you travel…* (Driver 3)

*A positive thing that I think is cool with the apps is the availability of time, that is, you stay online the time you want, for the period you want … I think this is fantastic, the question of you having the freedom to choose whether you want to work or not.* (Driver 7)

This preference for flexibility different from the benefits of traditional jobs with defined hours has been associated with higher levels of subjective well-being and reported in surveys with the same people carried out in other countries. However, this tendency to de-standardize the workday leads to disorganization in the worker’s life, making working hours advance over non-working hours (Berger et al., 2018; Krein et al., 2018).

Another positive aspect mentioned by drivers is the possibility of interacting with a diversity of people. For example, one of the drivers interviewed has already carried passengers from 16 different countries in just three months. Similar perceptions are explicit in the following statements:
I like to exchange experiences and this is a positive thing ... so there is my life story and there is people's life story, each one has their own story, so this exchange of information is very cool, this is rewarding. (Driver 4).

You are on the street, you spend the whole day going around, and another is the diversity of people you talk to, inside the car you talk about IT, talk about law, about politics. People need to talk about what matters to them, and we are there for that, to talk about what they want to talk about. (Driver 8).

According to the drivers, other positive points are the possibility of working with a pleasant activity, such as driving, the remuneration acquired, even with all the changes mentioned above, and the fact of not having to be subordinate to a superior:

Ah, you don't have a boss, right!? You are your boss or the passenger is your boss there at that moment, but it's a quick move, so I think the fact that you don't have a boss is cool, you know your obligations there, you do it, it happens, and it's over, so this is a very cool point too. (Driver 1).

I do it because I like it, I like to drive, I like to relate to people, I've been doing Uber for 22 months, 11 months for a year doing 99 apps, I'm still Uber 5 rating driver, in 99 apps my rate is 4.97. So, I feel good. (Driver 4).

I like to do it, I have several stories on Uber, good and bad, but there are several stories, and I like what I do, I do Uber because I like to drive. (Driver 10).

There were also reports of the importance and significance of the act of getting involved in work activities. This shows that what was once associated only with monetary compensation today has been related to well-being acquired through involvement in work (Berger et al., 2018). Work fills a significant position in the lives of individuals, not only to obtain income but also representing physical and mental autonomy and social integration (Lopes & Burgardt, 2013) since this occupation sometimes supplies the feeling of productivity, demonstrating the importance in the constitution of identity (França et al., 2013). Identity arises from socialization, which is composed of the relational process, in which the individual is analyzed from the perspective of another person, and the biographical one, in which his own life story is considered. In other words, everything that makes up daily life and the social exchanges builds an identity (Raymundo & Jorge, 2018). Therefore, when considering the important position that work acquires in the lives of individuals, we can perceive the great potential it has in the construction of identity, exemplified here in the statements of three drivers:

But the importance of work in my life is this ... it is giving comfort to my family, personal and family achievements, being able to acquire a new good
... filling time, not being idle, imagine, I keep thinking about people unemployed... the two months that I was stopped, the bills coming in and I didn’t have the money to pay, look, it’s very complicated. (Driver 4).

I remember at the time that I left the office, I cried day and night, because that was what I did, it was 17 years there, doing that, then you lose that there and you are “my God, what do I do now?”, Then you feel useless, you think you are crap, that you are not good for doing anything and then how is it? It is just as well that it is only a period, then you see that there is no way and you get up, shake off the dust, and leave. (Driver 6).

As much as you are retired you have to have a job, you have to have an occupation. I see many people who retire, have no occupation, and end up dying earlier. Because I’m used to working, I think the body... if you’re used to working you need to do something, right. I think work is a satisfying thing, we need work, regardless of what it is, and you have to have work in your life as a motivation, that’s what I see as motivation. I will never stop working, sometimes I am working, sometimes even in a situation of being a volunteer, we do volunteer work at the church there, so we are always doing something. (Driver 10).

Work contributes to what is called the humanization of individuals, attributing to each one life full of meaning and usefulness. It also has the role of organizer of social life, influencing the self-perception and their environment, favoring personal growth and development. For some individuals, work takes on such importance that it starts to be considered as their “home” and even their “life”. Therefore, when a person feels excluded from the world of work, he starts to feel that, in addition to losing his place in the production system, his identity was changed (Silva & Helal, 2017).

The importance of work is also spelled out among the occupations that make up the domain of Occupational Therapy. However, it is not an aspect analyzed individually, but in the interrelation of the individual with his/her doing in a context and environment (American Occupational Therapy Association, 2015, 2020). We also need to consider the relevance of doing and its specificities - the meaning of the work for the individual and the demands of the activity.

Historically, Occupational Therapy arose from the need to enable and rehabilitate individuals for insertion and reintegration into the world of work (Watanabe & Nicolau, 2001; Lancman & Girardi, 2004). With the advancement of the profession, the work gained a new perspective and the occupational therapist started to have as a premise the knowledge not only of the job position but also of how the work practice and its relations take place, through the worker’s perspective. Thus, it became possible to establish assessment methods that would allow the individual's abilities and limitations to be associated with the demands of the job (Watanabe & Nicolau, 2001).

Regarding the aging process, it is up to the aforementioned professional to identify changes in occupational roles that tend to occur with the advancement of life to establish their intervention focused on offering the individual the
opportunity to experience the new, maintaining it in activity, aiming to maximize autonomy and independence in their occupations. In this sense, we need to be attentive to those who given all the changes in the labor market, retirement, and the age distribution of the population, are interested in their reintegration into the productive system (Mello, 2007; Tamai et al., 2010).

With the growing population aging, the peculiarities of the profession in this area of activity emerge, especially in a society in which work activities are increasingly combined with technology. This is because they are people with several decades of life who may never have had experiences in the use of current technologies and need to know how to handle them as work tools (Doll et al., 2017; Raymundo & Jorge, 2018).

Despite this, scientific production in Occupational Therapy on the subject is scarce. Even with the significant increase in the number of publications on occupational health between 2000 and 2013, most studies deal with Repetitive Strain Injury (RSI), Ergonomics, Mental Health and Work, and People with Disabilities, without focusing on the relationship of the aging process with work (Silva et al., 2016). Regarding the aging process, studies in the area are more focused on intervention in certain pathologies, fall control, and assistive technology resources.

Conclusion

In this study, we can highlight the importance of working with mobile transport applications in the lives of individuals who were away from the labor market due to the age discrimination existing in several companies, added to the economic crisis scenario, which caused the financial need to contribute to the family income and difficulty in obtaining professional relocation. We could highlight insecurity aspects as a negative characteristic of the activity performed and the flexibility of schedules as positive. However, in a more focused analysis, even flexibility can be a problem in the health of workers, with the long hours of work routinely performed. Although the existing literature predominantly points to the difficulty of older individuals in using ICT, the impact of the workers’ life history and their previous work histories was crucial, leading most of them to point out an ease for the use of these tools.

Finally, the importance of involvement in work activities for people’s lives and the need often compulsory to remain in such an occupation even at older ages leads to the need for further research on this doing by Occupational Therapy, especially at considering the constant technological advances and the growing population aging. We expect more research in the future on the theme addressed of this study and that the State and society will better understand the specifics of work both of the population over 50 and those who choose to work with applications, especially those of urban transportation.
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References


Aging, work, and technology: application driver as a laboral possibility for the 50+ population


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Corresponding author
Taiuani Marquine Raymundo
e-mail: taiuani@ufpr.br

Section Editor
Prof. Dra. Marcia Maria Pires Camargo Novelli