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# **MASTER THESIS**

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Research question	The effect of the number of work days in a week on employee turnover rate in the IT sector
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#### Abstract -

This is a brief paragraph (typically 100-350 words) that enables readers to review the whole thesis easily to see if it is something that will be of use to them. It should summarise the whole project and include the following areas: 1) the background to the study (problem under investigation, key points from the literature review, the reason why the project was undertaken); 2) an outline of the methods used, including the main characteristics of the participants; 3) a summary of the main findings, and 4) conclusions.

The abstract should not exceed one page of A4. It does not normally include references.

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#### 1.1 Introduction

19<sup>th</sup>-century capitalism thrived upon work hours as per the whims of the business owners. However, American labour unions limited this exploitation to a 40-hour work week (Glaveski, 2018). Businesses in the post-pandemic era are looking forward to rethinking this 9 to 5, 5 days a week model (Sanok, 2021). Research by Gartner in 2021 indicates that roughly one in every fifth employee is searching for another job. The Information Technology sector is feeling intense heat, with 31% of the employees seeking a new job in Q3 of 2021 in the United States (Wiles, 2021). Businesses need help to get talented people away. The desirability of an attractive work environment is crucial for keeping this talented human resource capital in grasp. Recently, many companies tested the new notion of a 4-day work week, like Microsoft Japan in 2019 and Perpetual Guardian (a Trust Management company in New Zealand) in 2018 (Paul, 2019). The exercise succeeded, with 92% of employees developing a fondness for the shorter week, reducing their time off by a quarter, along with the reduction of energy usage and waste of paper (Paul, 2021).

Several factors can influence the push and pull in the labour market today. Internet, connectivity, mental health awareness and the pandemic have pushed business owners to reform the old model. An employee value proposition beyond monetary benefits is vital, especially in the IT sector, where human capital is crucial. There have been several studies in the past conducted on the turnover intent of employees. However, these studies were conducted before the intervention of the pandemic, or they focused on multiple factors that cause employee turnover. Several more studies have discussed the business prospectus of implementing this or dealing with productivity. This study adds a new dimension by focusing on the causal relationship between the number of working days in a week and the intent of employees to turnover.

#### 1.2 Research Question

"Is there a relationship between the number of hours per week at work and employee turnover?"

According to a study by Statista in 2022, Organization for Economic Co-operation and Development (OECD) countries' average weekly working hours were 1716 per year (33 hrs per week) in 2021 (Statista, 2022). Moreover, countries like Belgium have already legislated and legalised the 4-day work as a worker norm. However, this is supposedly a compressed

work week rather than reducing the working hours to 32 per week (Joly, 2022). Furthermore, there are 4-day work week pilot projects in the US, Canada, and many other world countries (Fox, 2022). This pilot is based on improving productivity by reducing the number of hours without reducing the pay and using this as a tool to retain and attract employees. The considerable attractiveness of this new change is gaining consensus among the new generation. Whether it can be a prominent factor enticing an employee to switch to a company that offers this benefit is the question that this study will address. The research is principled on the choice between a 4-day work week and a 5-day work week and the willingness of the employee to choose while having equal pay. It attempts to analyse the workers' attitudes towards these two choices and build a case for better employment prospects in the IT sector.

Management science has led the initiative of backing up the idea of a 4-day work week. However, the implementation is a significant setback for achieving this. Nevertheless, there are several other additional benefits that a 4-day work week brings along with talent management (employee retention and job satisfaction) and productivity, like – reduced carbon footprint and playing a vital role in fighting the effects of climate change. With the research, management science would have one more reason for implementing this organisational and cultural change. The social implication of this study is directly related to mental well-being and a healthy corporate lifestyle with a place for family time. Employees can deliver more with their recharged mental and physical health with more free time. It would reduce stress, the cases of medical leaves or absenteeism and result in a brand loyal and happier employee.

Along with these implications, economic growth has stumbled due to global factors. Adding in technological advancements like artificial intelligence, there is a risk of loss of jobs. The 4-day work week, which is enshrined to provide a triple benefit of productivity, mental well-being of the society and reducing the carbon footprints, can also provide a solution to the businesses that are struggling to provide an inflationary hike in pay by reducing the time; but demanding the same delivery of work from the employees.

#### 2.1 Literature Review

The prospect of a 4-day workweek can be segmented into the following categories:

- i) Productivity Business Cost
- ii) Employees The attitude and perception of the working hours in a week
- iii) Mental Health and healthy being
- iv) Social cause, Technological Advancements, and the legislative considerations

#### 2.1.1 **Productivity – Business Cost**

Weaver and Hartman were the earliest researchers to attempt an investigation to test the relationship between productivity in a four-day work week (direct, measurable variable) and 21 other indirect variables in 1975. However, the definition of the 4-day work week was a compressed 4-day 40-hour work week. One of those indirect variables was its impact on employee turnover. The study tests these variables using regression analysis and postulates an increase in overall productivity in performance. However, the duration of this increased productivity is a caution (Weaver, Hartman, 1976). This result is based on assumptions over half a century old and that technology and work environments have evolved. The definition of a 5-day work week in several countries of Europe and North America and among the OECD nations is less than or equal to 35 hours per week (Statista, 2022). The modern 4-day work week is 32 hours (Schor et al., 2022, pp 4).

Businesses carry out several types of research in cooperation with contributing researchers from reputed universities across the globe in correlation with productivity. A recent test conducted in the global 4-day workweek pilot project from employees from the United States, United Kingdom, New Zealand, Australia, and Ireland for six months reported that the overall productivity in the 16 companies participating in the study increased. The mean increase in their revenues was 8.14%. The study was conducted during the "great resignation"; nevertheless, there was an increase in the number of employees in these companies (Schor et al., 2022, pp. 15-18). This does not entirely quantify productivity as there can be several reasons for the increase in revenue, like post covid recovery and inflation. Adding more employees can also increase the company's training and onboarding costs, negatively impacting productivity (Weaver, Hartman, 1976).

#### 2.1.2 Employees – The attitude and perception of the working hours in a week

The study by Mahoney, Newman, and Frost in 1975 tested workers' attitudes towards a compressed work week (4 days 40 hours) in the United States. Their study concludes that the workers' attitudes toward the four-day workweek reflect their wants for more leisure time and how they see the four-forty schedule affecting that time. Their attitudes are unrelated to personal and family traits, work qualities, and job satisfaction. Workers who perceive leisure in a days-per-week framework indicate good sentiments about the four-day week. In contrast, those who view leisure in an hours-per-day context express a negative opinion (Mahoney et al., 1975). The results of this research do not consider the alleged job dissatisfaction resulting in a reaction towards a 4-day work week. Instead, it tests the attitudes based on the worker's perception of a 4-day workweek regarding the number of hours and leisure capability.

The perception is also linked with productivity. A positive perception towards lesser working hours can be an undesirable strategy for businesses if the employees are forced to finish the tasks by speeding up. The study conducted by the Perpetual Guardian highlights that around 33% of employees had to intensify their pace of work. The employees were not feeling job insecure and did not take up a second job to work on their days off (Perpetual Guardian et al., 2022). 97% of these employees said they wanted to continue working four days a week. The perception also depends on the monetary benefits. If the employees working for four days are offered an increase in monetary benefits of up to 25%, 32% would turnover (Schor et al., 2022). This study would therefore test the consequence of an employee's choice if the amount of money paid and the number of hours worked together is practically the same. Doing this would eliminate the requirement of speeding up work as they would have the same working hours in the year and the week.

#### 2.1.3 Mental Health and Healthy Being

Mental health and family well-being are regarded as critical forces for decision-making. The research considers various other factors that are associated with long working hours. A study in Hongkong in 2016 investigated employees' difficulties in striking the right work-life balance. People in big cities face family conflicts due to insufficient time for their families. It casts a catastrophic shadow on being unable to spend more leisure time with the family. The study contends to persuade employers to provide flexible work time and reduce the working

days in a week for the well-being of the employees (Chou et al., 2016). Furthermore, in the information age, stress is unleashed by the overuse of technology on employees. It tends to result in higher employee turnover in the IT sector, work-family conflicts, and family burnout (Haris et al., 2021). Another study by Harr Jarrod in New Zealand highlights the issue of burnout among managers. They face severe stress and fatigue complemented by a lack of family time, eventually leading to impending mental health and a desire to secure a new job (Harry, 2022).

All these studies aid in understanding that stress is an undue disadvantage often overlooked in the IT industry. One of the proposed solutions is to reduce the working hours or provide more flexibility to employees. Stress and mental health contribute to the highest turnover rate in the industry. Along with the reduction in the time for boosting productivity, the element of mental health needs to be holistic. The focus should not only be on reducing working hours, but it should also be contributing towards the reduction in the overall work itself. If not, this may add to the workers' burden of being more intense and stressful (Russell et al., 2022). Hence, the method of testing the perception of working days per week will try to infuse the same workload on the employees with similar working hours per year. However, it will test the choice of employees between these two offerings.

#### 2.1.4 Social Causes, Technological Advancements, and the Legislative Considerations

Parkinson's law states that work expands to fill the available time the employees have at their disposal. Additionally, the 80/20 principle states that 80% of productivity is achieved under 20% of the utilised time. Based on these principles and claiming evidence of productivity, the UK-based New Economic Foundation proposes a work week of 21 hours. This is evidently for the betterment of society – where the issues like overwork, burnout, unemployment, climate change, economic inequalities, and the deficiency of time to live sustainably by focusing on physical and mental well-being can be dealt with (Perpetual Guardian, 2022). According to Dr. Heejung Chung, Social policy experts should steer the conversation into a 4-day work week to incentivise employees' rights. It can benefit society to have a four-day workweek rather than laying off employees (Chung, 2022).

A similar view is echoed in the research conducted in 2019 to understand the minimum amount of work required to be financially efficient and the dependence of the number of working hours on mental well-being. For the people who are currently unemployed, it has a

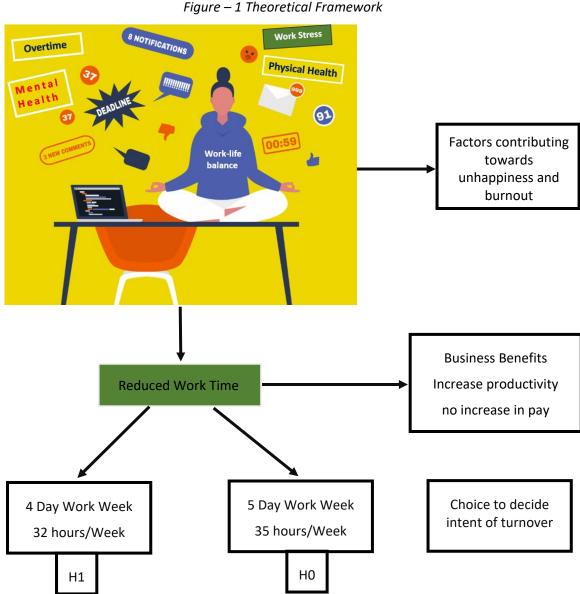
considerable positive impact on the people that were previously unemployed. However, mental well-being is not affected much among those working 1-8 hours a week and those working 44 hours a week (Daiga Et al., 2019). These results are more generalised, and it also considers the people who are unemployed compared to the ones that are employed. Here, the mental well-being of the sample is not being tested on the same scale. Hence, in this study, the comparison of mental health would consider people in similar employment conditions and the effect of a choice.

Studies conducted in the past by the World Health Organization (WHO) and the International Labour Organization (ILO) highlight the detrimental effects of longer working hours on workers. These include the correlation between longer working hours and higher rates of heart disease and strokes (Frank et al., 2021). Due to the correlation, many governments in the recent past have conducted several experiments. For example, in the experiment conducted in Sweden among social work agencies and government offices, there have been discoveries of health and well-being issues like lack of sleep and the friction between work and family life (Barck-Holst et al., 2017). Moreover, one of the earliest work time reduction trials was conducted in Iceland with the cooperation of over 2500 employees. Participants reported reduced stress, more enthusiasm toward work, less family conflict and happiness at work (Haraldsson et al., 2021). The life satisfaction of workers in Japan and South Korea was also improved with the reduction of working hours from 48 and 44, respectively, to 40 hours a week (Hamermesh, 2016).

It is clear from the previous studies that the turnover intent can be because of various factors. These studies have provided a business sense of the cost benefits of reducing working hours. In addition, there is an apparent inclination towards a 4-day work week as it is a win-win situation for all. Considering all these factors, this study would test the choice offered to the employees between the number of workdays. It would highlight the behavioural perception of employees. The correlation between the number of working days in a week and the intent of turnover would be tested by keeping the total working hours per year the same for both cases. This research would then complement the previous studies and test this correlation. Furthermore, it would draw a clear image of the turnover intent from a 4-day work week (32hrs) to a 5-day work week (35hrs) and vice versa across the two genders and various age groups.

#### 3.1 Theoretical Framework

The theoretical framework guiding this study is based on the facts from previous studies. The previous studies' determinants indicate an increasing concern in the technology industry to curb employee turnover. Several factors can lead to an employee turning over, such as work stress, occupancy in work-related problems leading to overwork, and conversely, sparing less time for the families. It leads to conflicts and a decline in an employee's happiness and well-being. One of the solutions to this critical situation is to allow the employee to have reduced work time. However, this reduced work time can either be a 4-day work week, where the employee works for 32 hours a week or a 5-day work week, where the employee works 35 hours a week. The dependent variable for the entire study is the employee's intent to turn over when the two choices are offered.



The previous studies have either studied the benefits of reduced work time or tested the employees' productivity. In both cases, employees' intent to turn over was not directly compared to the two scenarios. This study uses the previous research and compares the two scenarios of a 4-day 32-hour work week with a 5-day 35-hour work week. The number of working hours per week is the two independent variables testing the dependent variable of employee turnover.

As per the data from the OECD countries, the number of hours for a 5-day work is 35 (Statista, 2022). The number of hours for a 4-day work week is derived from the previous trials conducted in several countries and the recent Perpetual Guardian research conducted in New Zealand, the United States, Australia, the United Kingdom, Canada, and Ireland (Perpetual Guardian, 2022).

Furthermore, the number of working hours per year for both cases is the same to make the test unbiased towards any of the choices and to test the clear intent of turnover. The calculation for that is shown below in Table 1:

	4 Days a Week	5 Days a Week
Total Workdays (52 weeks)	208	260
Paid Days Off Per Year	10	34
Number of Working Days Per Year	198	226
Hours Per Day	8	7
Total Hours Worked Per Year	1584	1582

Table 1 – Allocation of equal working hours per year for both the cases

Based on this theory, the hypotheses proposed are as follows:

**H1** - A four-day workweek over a five-day workweek can increase the possibility of the employee turning over.

#### **H0** – Null Hypothesis

After collecting relevant data, one of the two hypotheses would be more effective for turning over an employee.

#### 4.1 Data Collection

Testing of the hypothesis is done using primary data. This aspect is the addition and continuation of the ongoing research in this field. This research will provide the exploits of testing the employees' attitudes in a real-life work environment having a choice to choose the alternative. It is done by building a web application using Otree (Python), randomly assigning the participants with a specific weekly working day condition. This application is then hosted on Heroku (an online cloud server), allowing participants to access the experiment using an online link.

#### 4.1.1 Method of Data Collection

The participants fill up their basic demographic details like age and gender in the first step. Then they are introduced to one of the two random conditions shown in Figures 2 and 3.

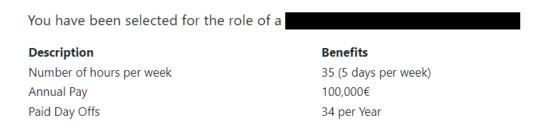


Figure 2 – Condition 0 in the Otree Experiment

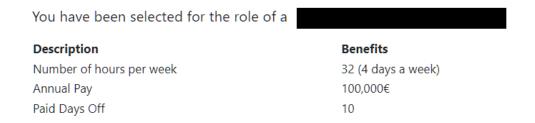


Figure 3 – Condition 1 in the Otree Experiment

The choice is offered in the next step, where the two hypotheses and the employee's behaviour will be tested with an experimental design setup. Participants are then offered the alternative based on their initial offering. Here, they can make the other choice if they wish to. While they are selecting the alternative, a comparison between the two choices will be displayed, with all the details (Figures 4 and 5).

Description	Previous Offer	Alternative Offer
Number of hours per week	35 (5 days/week)	32 (4 days/week)
Annual Pay	€100,000	€100,000
Paid Days Off	34 per year	10 per year
Total Working Hours Per Year	1582	1584

Figure 4 - Alternative for Condition 0

Description	Previous Offer	Alternative Offer
Number of hours per week	32 (4 days/week)	35 (5 days/week)
Annual Pay	€100,000	€100,000
Paid Days off	10 per year	34 per year
Total Working Hours Per Year	1584	1582

Figure 5 - Alternative for Condition 1

The information is displayed with a clear intent to provide the participant with all the necessary information before making a choice. Based on all the choices selected, the preference of choice could be analysed. Moreover, it leads the experiment to conclude if the dimension of time is critical in turning over the employee.

#### 4.1.2 <u>Intended Sample and Size</u>

For this study, the intended sample consists of employees working in the IT industry in Canada, North America, and employees working in Europe in the IT industry. The sample will comprise 60 individuals, equally divided between men and women, with ages ranging from 20 to 50 (with the lowest age being 24 and the highest being 48). To gather data, an Otree application was developed and hosted on Heroku (a cloud-based online server), allowing participants to make their choices using the online application. As a result, the participants portray a diverse and balanced group comprising two genders and varied age groups. In addition, the Otree application ensured randomization between a 4-day and a 5-day work week.

Several academic research papers provide insights into establishing a sufficient sample size for this research. With a sample size of 60 participants, this study adheres to the fairly common practice in statistics where a sample size of 30 or more increases the confidence interval of the population data set, allowing for robust findings and enhancing the likelihood of the sample being representative of the population (Chang et

al., 2006). This selected sample was provided with an online link to participate in the experiment.

### 4.2 Data Analysis

The analysis of the data acquired is described in this section. It will be displayed in the following categories:

- 1. Sample Overview
- 2. Data Analysis
- **3.** Turnover Intent
- 4. Result

#### 4.2.1 Sample Overview

The data was collected from 60 participants. 29 (49%) were randomly assigned a 5-day work week and were later offered the alternative, upon which they either accepted or rejected it. On the other hand, 31 (51%) were assigned a 4-day work week and were later offered the alternative, upon which they either accepted or rejected it. The intention was equal participation for both these conditions (4 and 5 days). However, the participants might have executed only some of the online application steps, resulting in null values as their final choice. Hence, it led to a slight difference in the intended equilibrium between the two choices offered for selection.

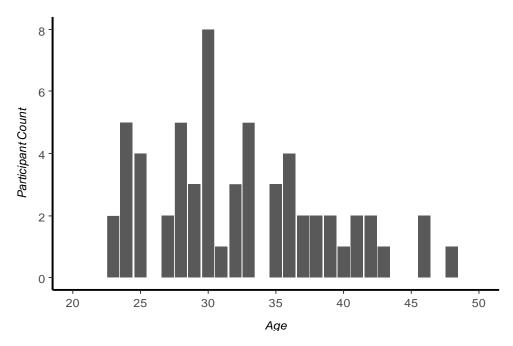


Figure 6 – Age Distribution of Participants

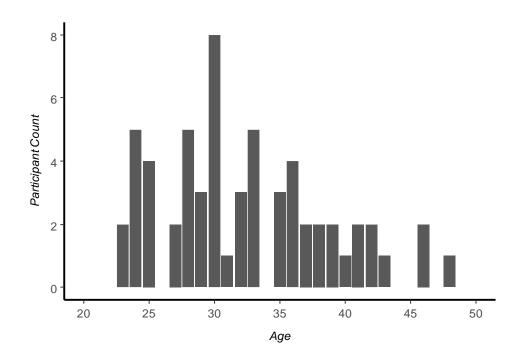


Figure 7 – Age Distribution of Male Participants

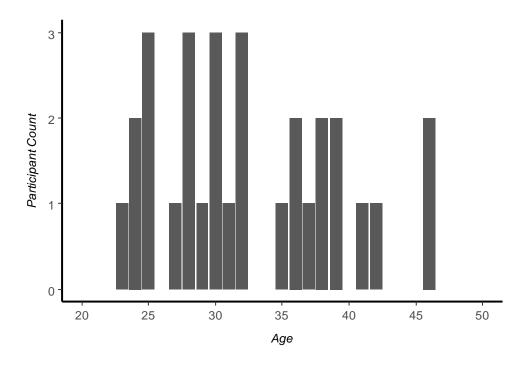


Figure 8 – Age Distribution of Female Participants

The distribution of the age groups of the participants is shown in Figure 6. The age distribution among the male and female participants is shown in Figures 7 & 8. The statistical figures for participants' age are provided in Table 2. The overall data set includes 30 male and 30 female participants. Therefore, table 2 also contains separate statistics for

each gender. The maximum age for female participants was 46, while for males, the maximum was 48. It also contains two age groups – (21 to 30) and (31 to 50), both 50%.

	Min	1st Quartile	Median	Mean	3rd Quartile	Max
Overall	23	28	31.50	32.42	36.25	48
Female	23	28	31.50	32.53	37.25	46
Male	23	28.25	31.50	32.30	35.75	48

Table 2 – Summary Statistics of Age Distribution of All Participants

The distribution of participants in terms of age groups and gender is shown in Table 3. The two conditions are a 4-day work week as the original offering and a 5-day work week as the alternative choice. The second condition is having a 5-day work week as the original offering and a 4-day work week as the alternative offered. Table 3 shows the essential details about the demographics of the participants.

	4 – Days Week (Original Choice)	5 – Days Week (Original Choice)
Female Participants	42%	58%
Male Participants	58%	42%
Min Age	23	24
Max Age	48	42
Mean Age	33.52	31.24
Median Age	32	30
Age Group (21 – 30)	45%	55%
Age Group (31 – 50)	55%	45%

Table 3 – Summary Statistics of gender and Age distribution of all participants in both the conditions (Day – 4 and Day – 5 as the original conditions)

#### 4.2.2 **Data Analysis**

#### **Particpant Acceptance of the Alternative Choice**

58% want to stay with 5 Days work week

Alternate Choice Original Offering

Alternate Choice Alte

Figure 8 – Overview Intent of Turnover

Original Offered Choice

The overall inclination of the participants has shown that more participants would turnover from a 4-day work week to a 5-day week. When the initial offering was 5 days per week, 58% of the participants were reluctant to turn over to a 4-day week. In contrast, when the initial offering was 4 working days, the turnover intent was expressed by 60% of the participants. However, the overall result is a combination of factors like age groups and gender.

#### Participant Acceptance of the Alternative Choice Age Group (20-30 Years)

64% want to stay with 5 Days work week

66% employees accept the alternate choice of 5 Days from 4 Work Days per week



Figure 9 – Intent of Turnover for age group (21-30 Years)

The intent of participants between the ages 21 to 30, as represented in figure 9, shows that people are more inclined towards turning over from a 4-day work week to a 5-day work week. More than 60% participants who were originally offered a 4-day work week have implied on turning over to a 5-day work week. Moreover, 64% participants are reluctant from turning over from a 5-day work week to a 4-day work week.

The participants in the age group 31 to 50 years, as represented in Figure – 10, show that people in this age group are inclined to accept the alternative offer. When the initial offer is a 5-day work week, 52% intend to turn over to a 4-day work week. However, the intent is slightly higher, 60%, when the initial offering is a 4-day work week.

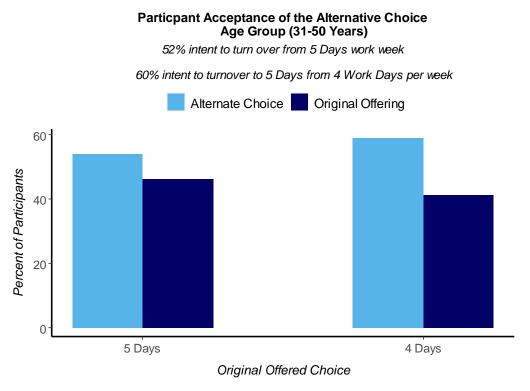


Figure 10 – Intent of Turnover for age group (31-50 Years)

#### Gender Analysis of 4 Days Work Week as the Original Choice

More than 60% of both the genders express their intent of turning over to 5 work days per week

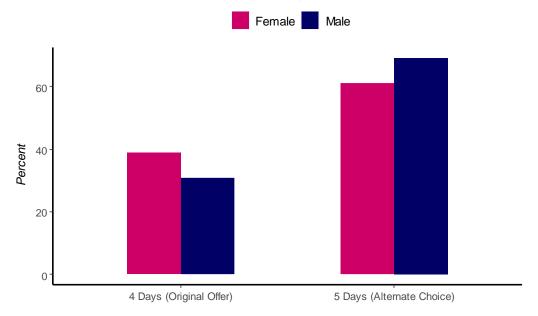


Figure 10 – Intent of Turnover for age group (31-50 Years)

#### Gender Analysis of 5 Days Work Week as the Original Choice

84% women participants want to stay with the Original condition of 5 Working Days

60% men express to accept the alternate choice of 4 work days per week

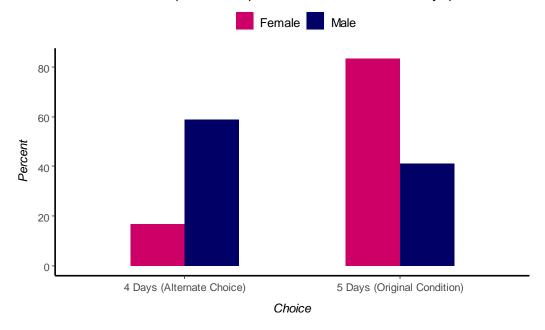


Figure 10 – Intent of Turnover for age group (31-50 Years)

## 4.2.3 <u>Turnover Analysis</u>

Figure 10 – Intent of Turnover for age group (31-50 Years)

- 4.2.4 <u>Result</u>
- 5.1 Recommendations
- 6.1 Limitations of the Study
- 7.1 Conclusion

#### 8.1 **Bibliography**

- Barck-Holst, Peter, Åsa Nilsonne, Torbjörn Åkerstedt, and Carina Hellgren. 2017. "Reduced Working Hours and Stress in the Swedish Social Services: A Longitudinal Study."

  International Social Work 60(4):897–913. doi: 10.1177/0020872815580045.
- Chang, H. J., K. Huang, and C. Wu. "Determination of sample size in using central limit theorem for weibull distribution." *International Journal of Information and Management Sciences*, Vol. 17, No. 3. 2006, pp. 153-174
- Chung, H. (2022). A Social Policy Case for a Four-Day Week. *Journal of Social Policy, 51*(3), 551-566. doi:10.1017/S004727942200018
- Chou, K. L., & Cheung, K. C. K. (2016). Family-friendly policies in the workplace and their effect on work–life conflicts in Hong Kong. *The International Journal of Human Resource Management*, 24(20), 3872–3885. https://doi.org/10.1080/09585192.2013.781529
- Daiga Kamerāde, Senhu Wang, Brendan Burchell, Sarah Ursula Balderson, Adam Coutts, A shorter working week for everyone: How much-paid work is needed for mental health and well-being? Social Science & Medicine, Volume 241, 2019, 112353, ISSN 0277-9536, https://doi.org/10.1016/j.socscimed.2019.06.006.
- Fox, M. (2022, April 8). A four-day workweek pilot program is now underway in the U.S. and Canada. CNBC. https://www.cnbc.com/2022/04/01/four-day-workweek-pilot-program-is-now-underway-in-the-us-and-canada.html

- Frank Pega, Bálint Náfrádi, Natalie C. Momen, Yuka Ujita, Kai N. Streicher, Annette M. PrüssÜstün, Alexis Descatha, Tim Driscoll, Frida M. Fischer, Lode Godderis, Hannah M.

  Kiiver, Jian Li, Linda L. Magnusson Hanson, Reiner Rugulies, Kathrine Sørensen,

  Tracey J. Woodruff, Global, regional, and national burdens of ischemic heart disease
  and stroke attributable to exposure to long working hours for 194 countries, 2000–
  2016: A systematic analysis from the WHO/ILO Joint Estimates of the Work-related
  Burden of Disease and Injury, Environment International, Volume 154, 2021, 106595,
  ISSN 0160-4120, https://doi.org/10.1016/j.envint.2021.106595.
- Glaveski. (2018, December 11). The Case for the 6-Hour Workday. Harvard Business

  Review. https://hbr.org/2018/12/the-case-for-the-6-hour-workday
- Haar, J. (2022). What are the odds of burnt-out risk and leaving the job? Turnover intent consequences of worker burnout using a two-sample New Zealand study.

  International Journal of Selection and Assessment. 10.1111/ijsa.12393.
- Hamermesh, Daniel S., Daiji Kawaguchi, and Jungmin Lee. 2017. "Does Labor Legislation

  Benefit Workers? Well-Being after an Hours Reduction." Journal of the Japanese and

  International Economies, Discussion Paper Series, 44 (June): 1–12.

  https://doi.org/10.1016/j. jjie.2017.02.003.
- Haraldsson, Guðmundur D, and Jack Kellam. 2021. "Going Public; Iceland's Journey to a Shorter Working Week." Alda and Autonomy. https://autonomy.work/wp-content/uploads/ 2021/06/ICELAND 4DW.pdf.
- Harris, K. J., Harris, R. B., Valle, M., Carlson, J., Carlson, D. S., Zivnuska, S., & Wiley, B. (2021).

  Technostress and the entitled employee: impacts on work and family. *Information*

Technology & People, 35(3), 1073–1095. <a href="https://doi-org.ezproxy.bsb-education.com/10.1108/ITP-07-2019-0348">https://doi-org.ezproxy.bsb-education.com/10.1108/ITP-07-2019-0348</a>

- Joly, J. (2022, November 21). Four-day week: Which countries have embraced it and how's it going so far? Euronews. https://www.euronews.com/next/2022/10/07/the-four-day-week-which-countries-have-embraced-it-and-how-s-it-going-so-far
- Mahoney, T. A., Newman, J. M., & Frost, P. J. (1975). Workers' Perceptions of the Four-Day

  Week. California Management Review, 18(1), 31–35.

  https://doi.org/10.2307/41164623
- Perpetual Guardian, Coulthard Barnes, Auckland University of Technology, University of Auckland & Minter Ellison Rudd Watts 2019, White Paper: the four-day week: guidelines for an outcome-based trial: raising productivity and engagement, Coulthard Barnes and Perpetual Guardian, [New Zealand], viewed 1 Dec 2022, <a href="https://www.4dayweek.co.nz/download-white-paper">https://www.4dayweek.co.nz/download-white-paper</a>.
- Paul, K. (2019, November 8). Microsoft Japan tested a four-day work week, and productivity jumped by 40%. The

  Guardian. https://www.theguardian.com/technology/2019/nov/04/microsoft-japan-four-day-work-week-productivity
- Russell, Murphy, & Terry. (2022, June 2). What Leaders Need to Know Before Trying a 4-Day Work Week. Harvard Business Review. https://hbr.org/2022/05/what-leaders-need-to-know-before-trying-a-4-day-work-week

- Sanok. (2021, October 11). How to Ask Your Boss For a 4-Day Workweek. Harvard Business

  Review. https://hbr.org/2021/09/how-to-ask-your-boss-for-a-4-day-workweek
- Schor, Juliet B., Wen Fan, Orla Kelly, Guolin Gu, Tatiana Bezdenezhnykh, Niamh Bridson-Hubbard, (2022). "The Four Day Week: Assessing Global Trials of Reduced Work Time with No Reduction in Pay," Four Day Week Global, Auckland, NZ, viewed 1 Dec 2022, https://www.4dayweek.com/us-ireland-results
- Statista. (2022, August 5). Average hours worked in a year per worker in OECD countries 2021. https://www.statista.com/statistics/263906/annual-working-hours-per-worker-in-oecd-countries/
- Weaver, K. M., & Hartman, R. I. (1976). Productivity and the Four-Day Workweek: An Empirical Investigation. Industrial Management, 18(6), 14
- Wiles. (n.d.). Turnover Risk Is Rising. Or Is It? Size Your Risk. Gartner.

  https://www.gartner.com/en/articles/worried-about-employee-turnover-ask-these-6-questions-to-size-your-risk

# 9.1 Appendices

## 

## This table has to be completed and joined in the annex of the professional thesis.

All along your professional thesis, you consider that you have developed, and you master the following skills:

		Little	Moderately	Highly
MGE MS 01 - To be able to analyse a situation and have a	To be able to collect and interpret relevant information and process it effectively			
	To be able to analyze a situation to guide action and decision making			
critical vision	To be able to carry out logical and rigorous reasoning			
	To know how to exercise one's critical mind			
MGE MS 02 - To be able to decipher a complex phenomenon and understand uncertainty	To be able to understand the complexity of a phenomenon			
	To know how to restitute information or analysis in a synthetic way			
MGE MS 04 - To know how to communicate effectively, both orally and in writing	To know how to present an argument in a structured, logical and rigorous manner			
	To know how to convince and be persuasive in your communication			
Commentaries				