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Research Proposal

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Research question	What is the effect of the number of work days in a week on employee turnover in the IT sector?
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ASSESSMENT CRITERIA for Research Proposal	Grade
An inspiring and enlightening title about the issue	/ 1
The research question is clear and precise	/ 3
The literature review refers to the research question proposes a coherent plan mentions at least 8 academic articles from ranked journals formulates clear and relevant ideas on the contributions of mobilized authors	/ 8
The theoretical framework chosen is explicit, justified and consistent with the research question and literature review	/ 3
The method is explicit, justified and adapted to the research question and theoretical framework selected	/ 3
The form of the bibliography and the number of academic references required are respected	/ 2
TOTAL	/ 20
<i>Regularity of student tutor exchanges</i>	<i>Yes / No</i>
<i>Respect of the delivery date</i>	<i>Yes / No</i>
<i>Self-assessment of skills (BSB®)</i>	<i>Yes / No</i>
Comments	

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1.1 Introduction

19th-century socialism 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 face the crisis of slipping 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, either 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 norm for workers. 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 well being
- iv) Social cause, Technological Advancements, and the legislative considerations

2.2 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 period of “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).

2.3 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. It tests the attitudes based on the worker's perception of a 4-day work week 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 are 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.

2.4 Mental Health and well 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 the reduction of 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).

2.5 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 ought to 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.

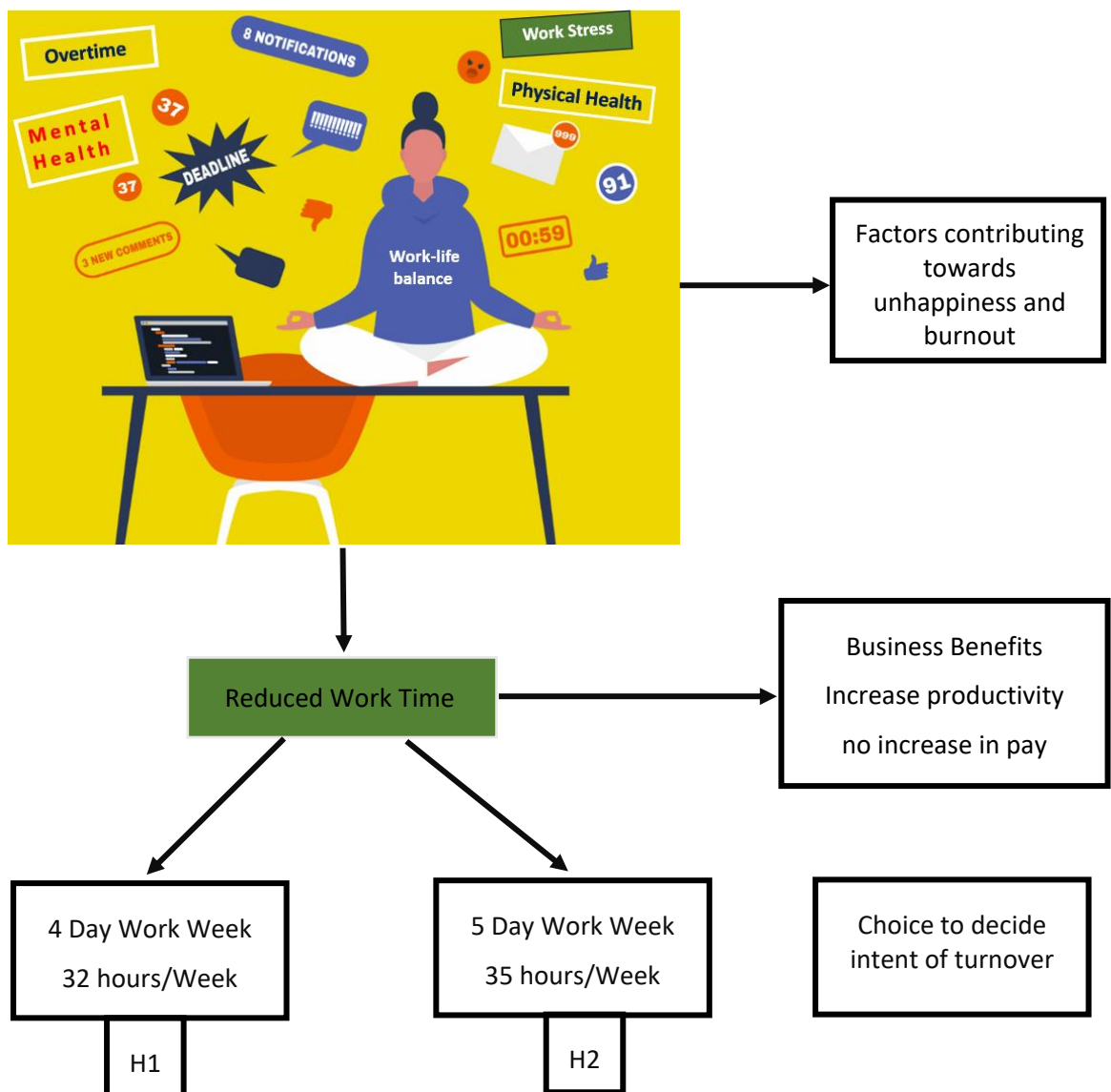
Studies conducted in the past by the World Health Organization (WHO) and the International Labour Organization (ILO) highlight the detrimental effects of longer working hours on workers. These include the correlation between longer working hours and higher rates of heart disease and strokes (Frank et al., 2021). Due to the correlation, many governments in the recent past have conducted several experiments. In the experiment conducted in Sweden among the 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 a reduction in stress, more enthusiasm towards 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. 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 week 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.

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 in 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.

Figure – 1 Theoretical Framework



The previous studies have either studied the benefits of reduced work time or tested the employees' productivity. In both cases, employees' intent of turning over was not directly compared with 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 in a week are 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, to make the test unbiased towards any of the choices and to test the clear intent of turnover, the number of working hours per year for both cases is the same. The calculation for that is shown below in table 1:

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

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

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

- 1) **H1** - A four-day workweek over a five-day workweek can increase the possibility of the employee turning over.
- 2) **H2** - A choice of a five-day workweek over a four-day workweek can increase the possibility of the employee turning over.

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

4.1 Method of Data Collection

The two hypotheses and the employee's behaviour when the choice is offered would be tested with an experimental design set up using otree. Using the otree platform would ensure balanced randomisation among the participants getting selected for a five-day or a four-day workweek.

Participants would be randomly assigned a job with a four-day or a five-day workweek. They will then be informed that there is an alternative option available, where 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 (Figure 2).

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 2 - Alternate Choice in the Otree Experiment

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.

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BSB® - Building up Skills for Business®: Self-assessment of skills developed during the research proposal

Following the completion of your Research Proposal, you feel that you have developed the following skills and you think you master them at what level?

		Little	Moderately	Highly
MGE MS 01 - To be able to analyse a situation and have a critical vision	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			✓
	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		✓	
MGE MS 04 - To know how to communicate effectively, both orally and in writing	To know how to restate information or analysis in a synthetic way			✓
	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			✓
Commentaires				