The Dynamics of Work Hours and Work-Life Balance: Insights from the General Social Survey*

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This paper examines the relationship between work hours and life quality using data from the US General Social Survey. Findings indicate that higher work satisfaction and financial comfort are associated with fewer work hours, highlighting inequalities based on social class. These insights underscore the importance of considering work hours in efforts to improve overall life satisfaction and work-life balance.

1 Introduction

Work hours, as a central facet of our daily routines, have profound implications for our well-being and life satisfaction. The quest for an optimal work-life balance (WLB) has become more pressing in recent years, amid reports of increasing work hours and their consequent impact on individuals' quality of life worldwide. The concept of WLB, however, is multifaceted and varies in its operational definition across different studies, reflecting the complexity of balancing professional obligations with personal life in a way that promotes individual growth and well-being.

Kalliath and Brough (2008) conceptualize WLB as "The individual's perception that work and non-work activities are compatible and promote growth in accordance with an individual's current life priorities," highlighting the subjective nature of achieving balance based on personal priorities and life stages. Similarly, the Canadian Department of Labor's perspective, as cited in Waters and Bardoel (2006), defines WLB more expansively as "a self-defined, self-determined state of well-being that a person can reach, or can set as a goal, that allows them to manage effectively multiple responsibilities at work, at home, and in their community; it

*Code and data are available at: https://github.com/FrankMengZJ/work-hours

supports physical, emotional, family, and community health, and does so without grief, stress or negative impact." These definitions underscore the personalized and dynamic nature of work-life balance, suggesting that achieving it involves managing various dimensions of life in a harmonious manner that minimizes stress and maximizes well-being. Drawing from the rich data provided by the US General Social Survey (GSS) conducted by Chicago (2024), this paper seeks to explore the intricate relationships between work hours and various factors, including financial satisfaction, personal well-being, social class perceptions, and demographic characteristics. The GSS dataset, renowned for its comprehensive coverage of the American population's attitudes and behaviors, offers a unique lens through which we can assess these dynamics over time.

The paper is structured as follows: The Data section details the sources, limitations, and preprocessing of the GSS dataset. The Results section presents our findings, showcasing the relationships between work hours and various factors across different demographic groups.

2 Data

Data used in this paper are retrieved from the US General Social Survey (GSS) from NORC at Chicago (2024). We retrieved demographic data as well as survey questions related to work hours from 1972 to 2022.

2.1 Source Data

Source Data For demographic factors and questions related to work hours, we retrieved the following data as described in Table 1

Table 1: Data Retrived

Variable	Description	Example
Year	Calendar year of the survey	2022
id	Unique identifier for each respondent	12345
age	Respondent's age	56
degree	Highest degree received by the respondent	Bachelor's
marital	Respondent's marital status	Divorced
babies	Number of babies in the household	2
preteen	Number of preteen children in the household	1
teens	Number of teenage children in the household	0
adults	Number of adult members in the household	2
wrkstat	Work status of the respondent	Full-time
earnrs	Number of earners in the household	1
income	Total family income recorded in the year	$50,000 to $59,999

Variable	Description	Example
relig	Religious affiliation of the respondent	3
happy	Respondent's overall happiness	3
health	Respondent's self-reported health status	3
satjob	Respondent's job satisfaction	3
satfin	Respondent's financial satisfaction	4
class	Self-identified social class of the respondent	Middle class
hrs	Total hours worked by the respondent in a week	40
sphrs	Total hours worked by the respondent's spouse in a week	35

2.2 Data Limitations

2.2.1 Non-response Error

The transition to web surveys in 2021 resulted in a lower response rate (17%) compared to the traditionally higher rates achieved through in-person surveys. Although this rate is high for web surveys, it marks a significant departure from past GSS methodologies. Differential participation rates across years could influence the representativeness of the survey data. While efforts to adjust for these differences using post-stratification weighting are made, the potential for non-response bias impacting trend comparisons remains a concern.

2.2.2 Remote Work

For remote work during the COVID-19 period, the shift to remote work can significantly affect the true total working hours reported. Without the clear boundaries that separate work from personal time in an office setting, remote employees might work longer hours, either by starting earlier, finishing later, or working intermittently across the day.

The transition to remote work has also introduced challenges in accurately reporting work hours. Employees working from home may have their work hours categorized as "NA" (not available) due to inconsistencies in self-reporting.

2.3 Data Cleaning

Data was cleaned and analyzed using the open source statistically programming language R Core Team (2023), using functionalities from Wickham et al. (2019), and Wickham, Miller, and Smith (2023).

The dataset was filtered to select key variables of interest, such as working hours, respondent demographics, and survey responses. This step involved selecting specific columns from the raw

GSS data, including year, identification variables, work hours, age, educational attainment, marital status, number of children in different age groups, work status, income, and measures of subjective well-being among others.

Missing values for work hours (hrs1, hrs2) and spouse's work hours (sphrs1, sphrs2) were set to 0, indicating no reported hours. Similar treatment was applied to variables indicating the number of children in different age groups and the number of earners in the household. New variables were created to represent total work hours (hrs) and spouse's total work hours (sphrs) by summing the respective variables. Records with no reported work hours or earners were filtered out to focus on employed respondents.

3 Results

Figure 1 shows the fluctuating average working hours per week from 1980 to beyond 2020, with notable peaks suggesting periods of increased work hours and a recent sharp decline, possibly indicating economic or policy changes.

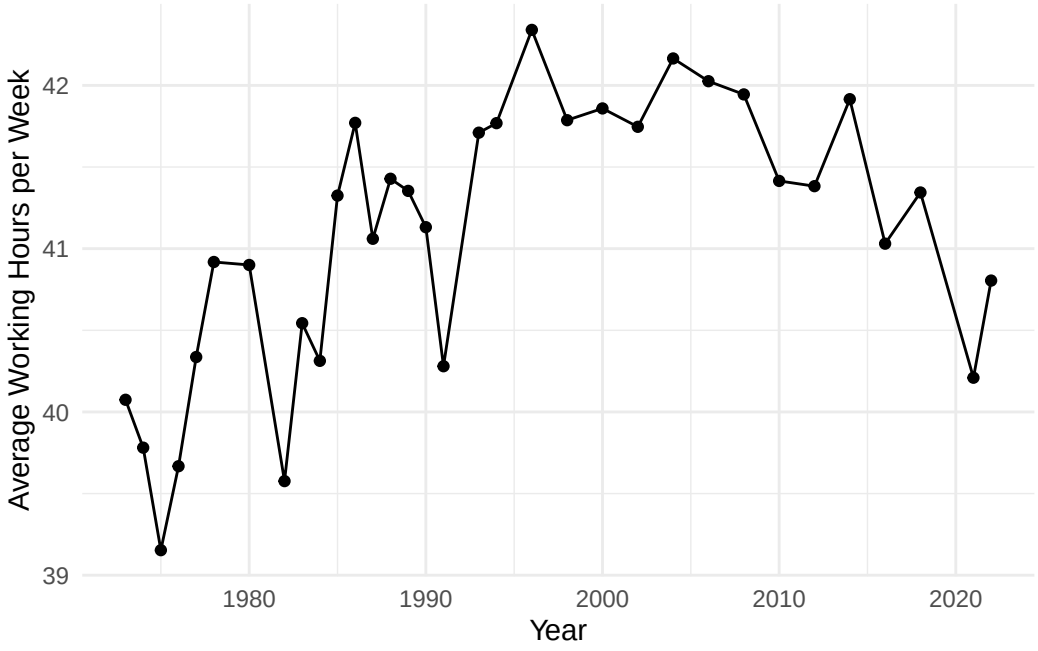

Figure 1: Average Working Hours per Year

Figure 2 displays the average working hours per week by social class,, the lower class works the most hours, and the upper class works the least, indicating a socioeconomic disparity in work hours.

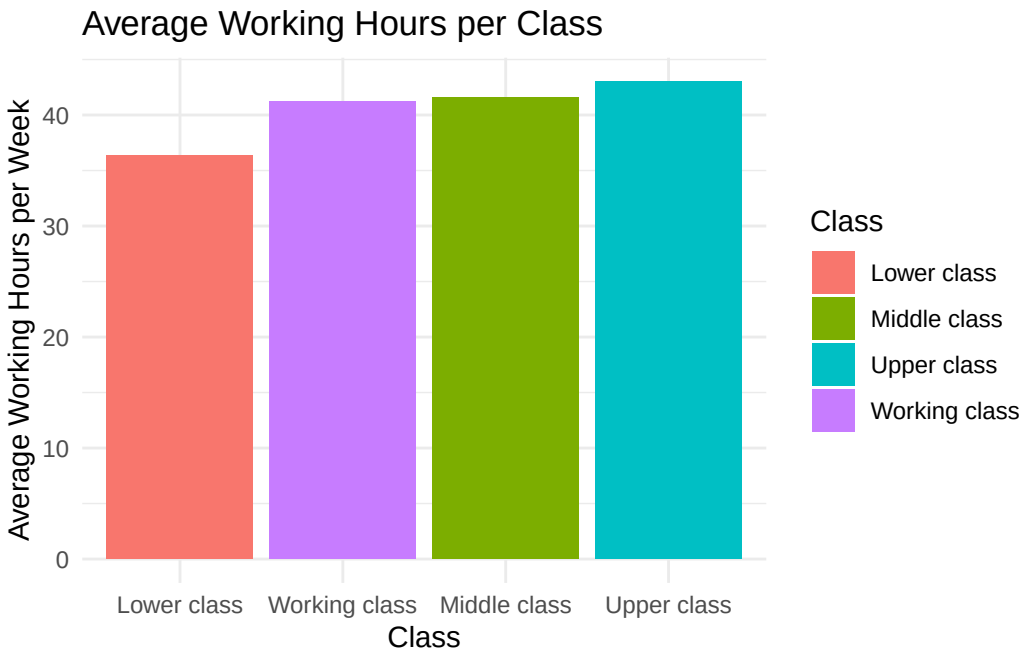

Figure 2: Average Working Hours per Class

Figure 3 and Figure 4 displayed average working hours across different age groups. Figure 3 presents a typical lifecycle pattern of average working hours per week in relation to age, showing an increase through early adulthood to middle age, then a decline as individuals pass the age of 60, likely due to retirement.

Figure 5 reveals a high degree of variability in working hours when the ratio of family members to earners is low, suggesting that in households where the number of earners is relatively high compared to family members, the working hours are inconsistent. This could be due to different work patterns or job types among earners.

As the ratio increases, which implies fewer earners compared to family members, the average working hours per week seem to decrease and stabilize. Interestingly, after the ratio surpasses 5, there is a significant drop in variability and a general downward trend in average working hours. This suggests that in households with a higher number of dependents per earner, the average working hours are lower and more consistent, possibly due to the constraints of balancing work and caregiving responsibilities.

Figure 6 illustrates a clear downward trend in average working hours as work satisfaction increases, suggesting a potential relationship between these two variables. This indicates that employees with higher work satisfaction tend to have fewer average working hours, which could be interpreted as a sign that better work-life balance leads to higher job satisfaction, or that happier employees are more efficient and thus need less time to complete their work. However,

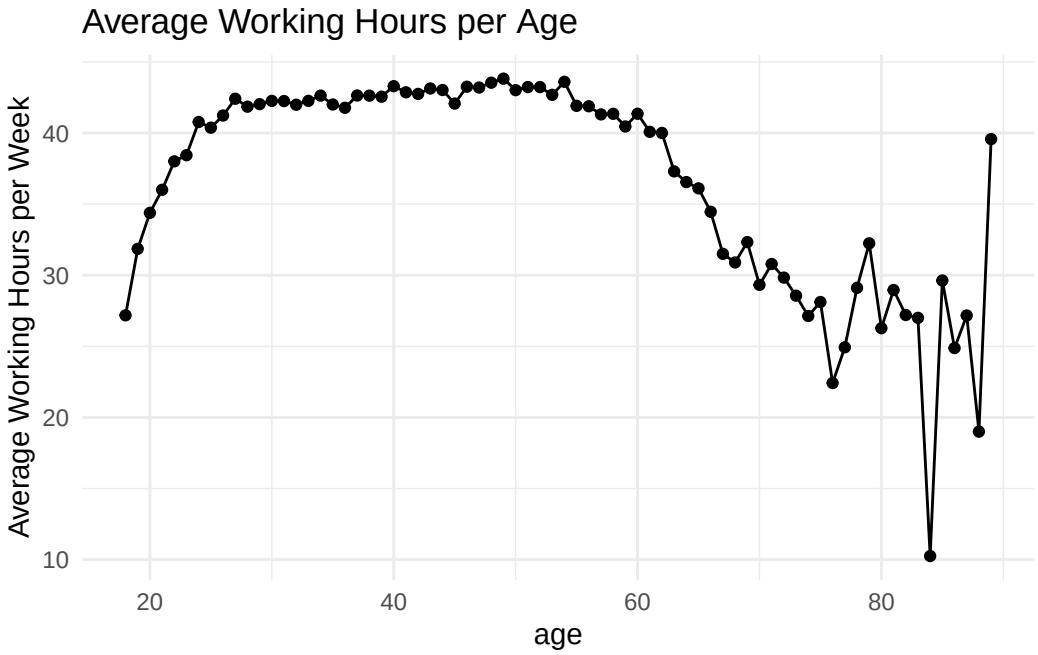

Figure 3: Average Working Hours per Age per Week

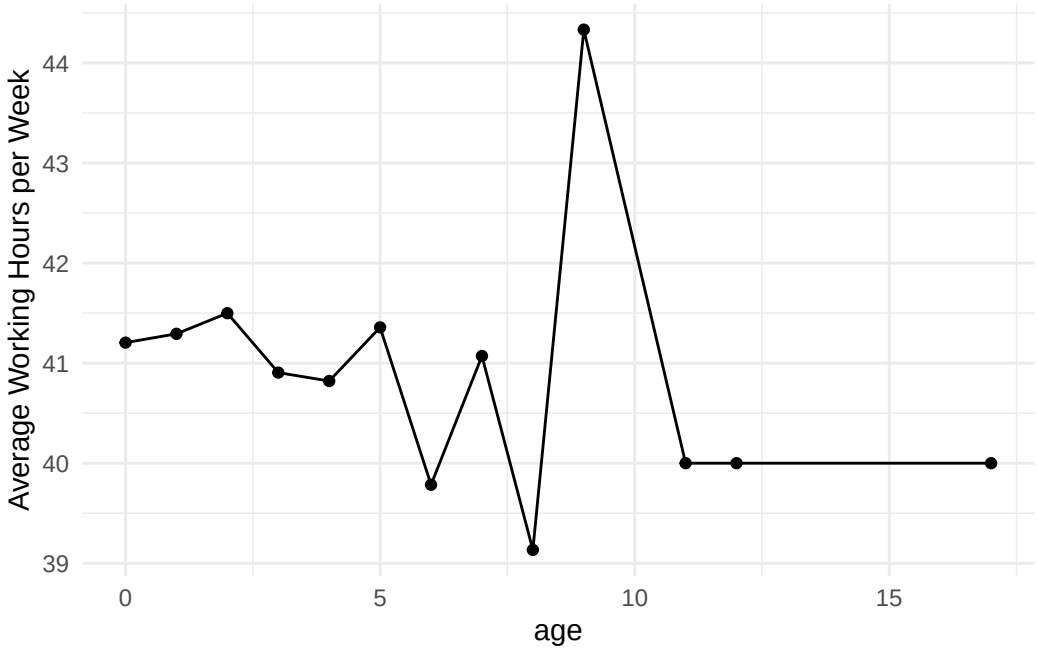

Figure 4: Average Working Hours per Number of Minors

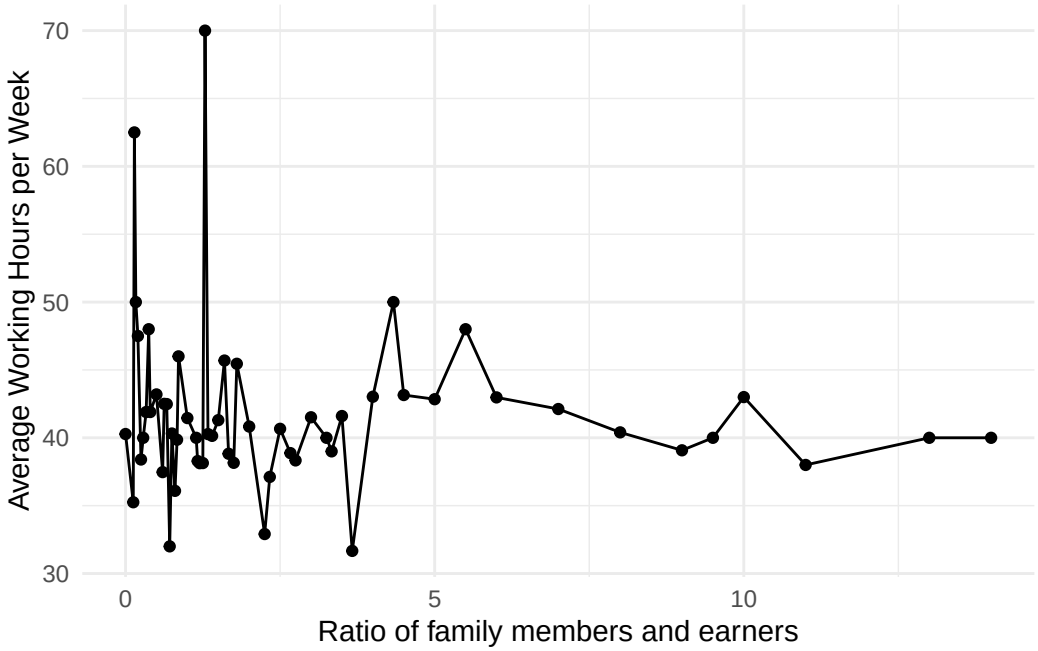

Figure 5: Average Working Hours per Ratio

it's crucial to note that correlation does not equal causation, and further analysis would be required to understand the underlying reasons for this relationship.

In Figure 7, the distribution of points indicates that for the majority of the working hours, average work satisfaction remains relatively stable, hovering around the 1.5 mark. There's no clear trend or correlation observable for most of the data range; however, there is a noticeable spike in work satisfaction at the highest end of the working hours spectrum. This could represent an anomaly or a specific situation where individuals working exceptionally long hours are reporting higher satisfaction, possibly due to high compensation, passion for their work, or other job-related benefits.

In Figure 8, it exhibits a downward slope, indicating that as financial satisfaction increases, the average working hours decrease. This could suggest that individuals who are more financially satisfied may be working fewer hours, perhaps due to higher wages or the ability to achieve a comfortable living without needing to work longer hours. Conversely, those with lower financial satisfaction may be working more hours, potentially due to lower wages requiring more work to meet financial needs.

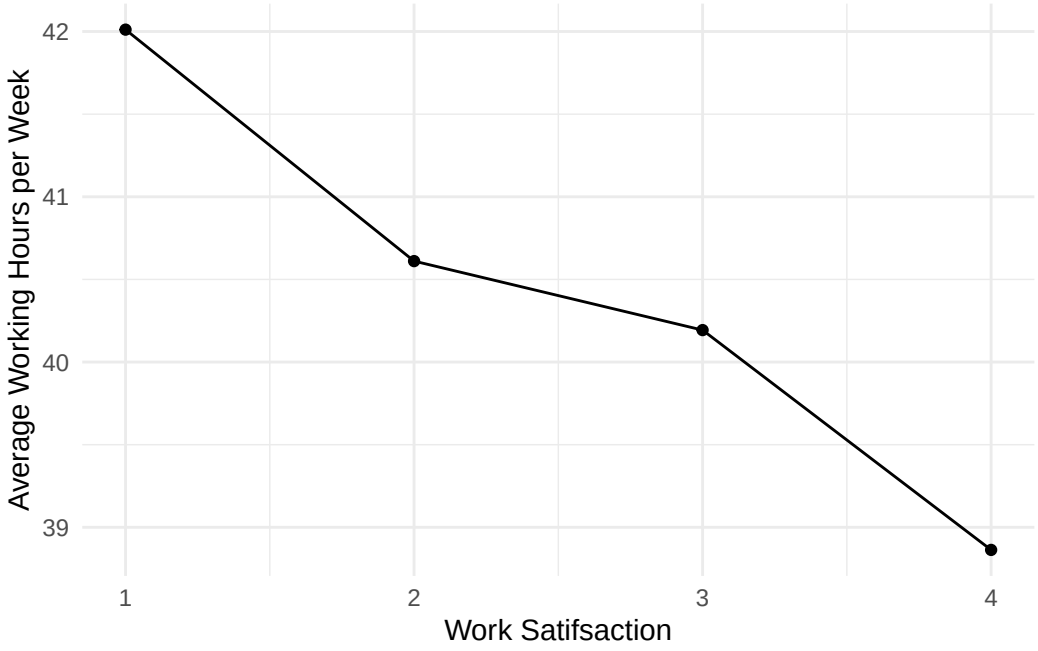

Figure 6: Work Satifsaction and Average Working Hours

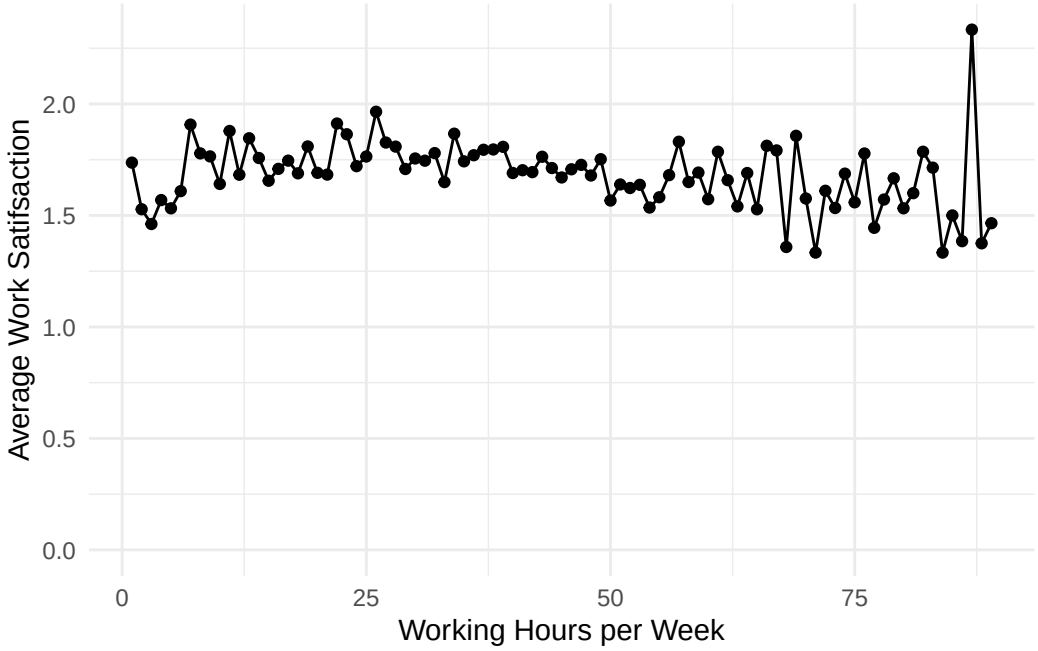

Figure 7: Working Hours and Average Work Satifsaction

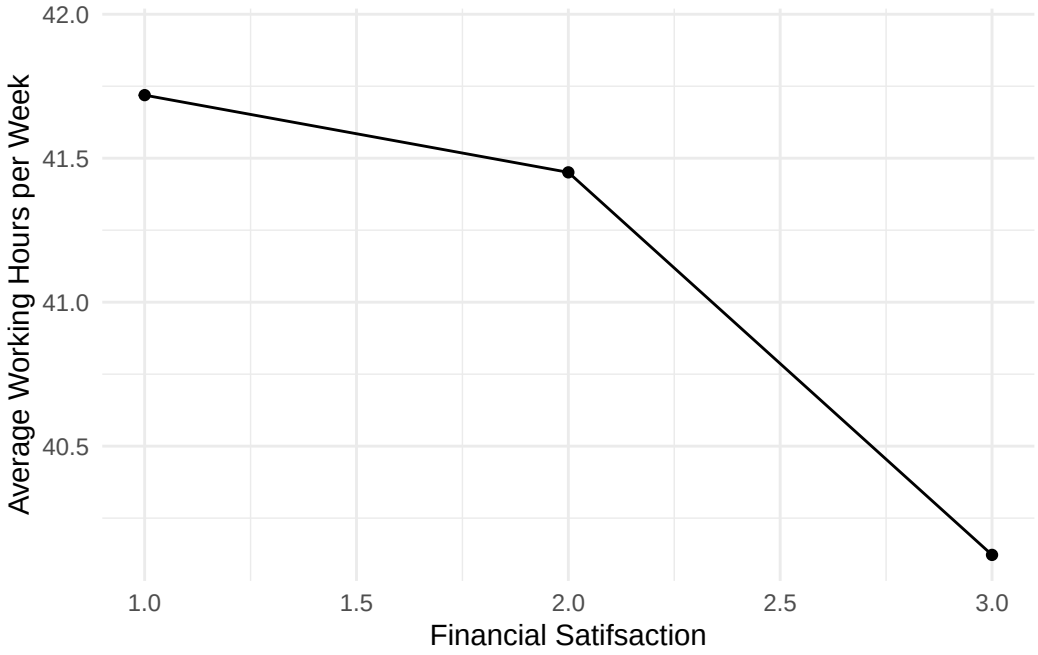

Figure 8: Financial Satifsaction and Average Working Hours

4 Discussion

4.1 First discussion point

4.2 Second discussion point

4.3 Third discussion point

4.4 Weaknesses and next steps

Appendix

References

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