

# The Association Between Hours Worked, Health, and Age



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### Introduction

- Since individuals dedicate substantial portions of their lives to work, it is important to understand the association between hours worked and health.
- Research primarily focuses on job satisfaction, indicating a nonlinear relationship where very low or high working hours lead to less satisfaction (Dong et al., 2023; Golden & Weis-Tuers, 2006).

Research Questions

- Does the number of hours someone works per week
- Additional studies show that extended work hours negatively affect occupational health and sleep (Wong et al., 2019; Marianna et al., 2009).
- Despite evidence of the adverse effects of long working hours, more studies are needed to explore the impact of various work schedules and the role demographic variables play in these dynamics (Ferguson et al., 2023).
- By exploring this relationship, healthier work-life balances and workplace changes can be implemented to benefit workers and their overall well-being.
  - Methods

### Sample

Respondents (n=914) were drawn from the 2018 General Social Survey (GSS), a nationally representative sample of non-institutionalized adults in the U.S. who speak either English or Spanish.

#### Measures

- Participants' weekly hours worked were measured with the question, "How many hours did you work last week at all jobs?".
- Perceived health was measured with the question, "Would you say your own health, in
- general, is excellent, good, fair or poor? ".
- The participants ages were collected.





affect their health?

Does the relationship
 between hours worked and
 health change for workers of
 different ages?

#### Univariate

 A total of 38.8% of the sample work over 40 hours, 51.3% reported they had good health, and 5.58% were older than 65.

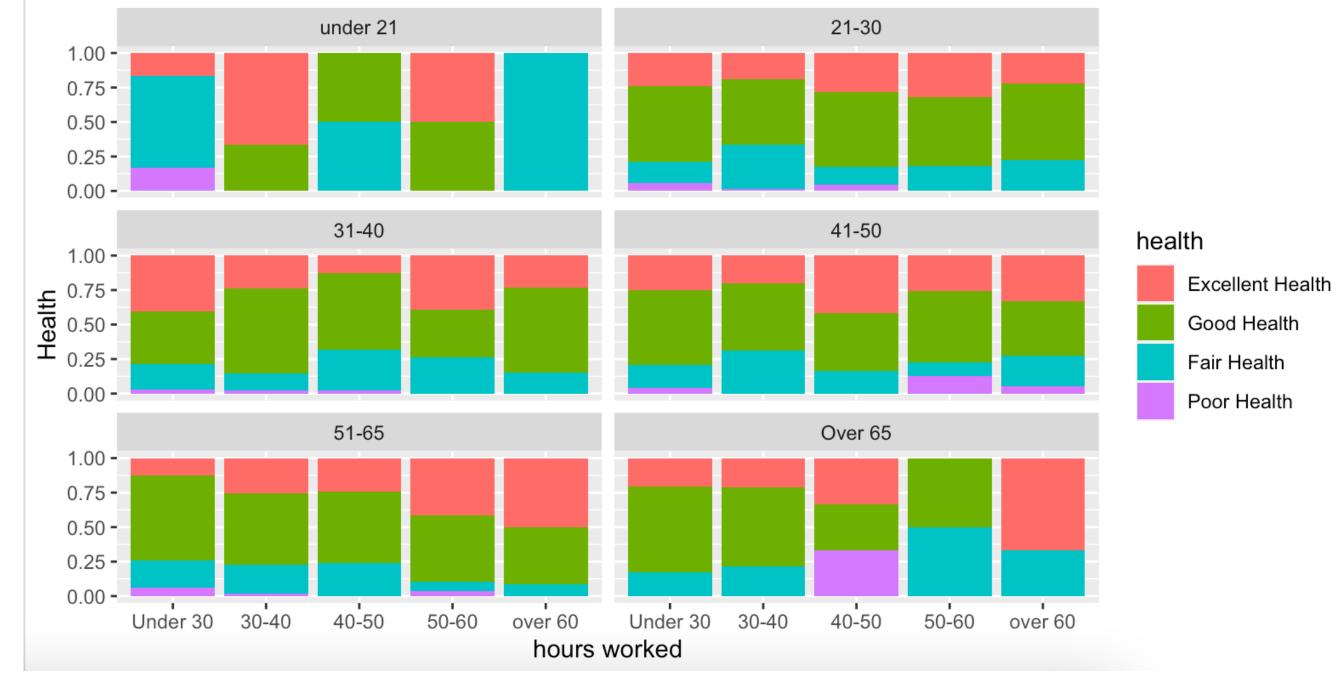
#### **Bivariate**

 Chi-Square analysis showed that hours worked were *not* significantly associated with worse perceived health. (p = 0.897).

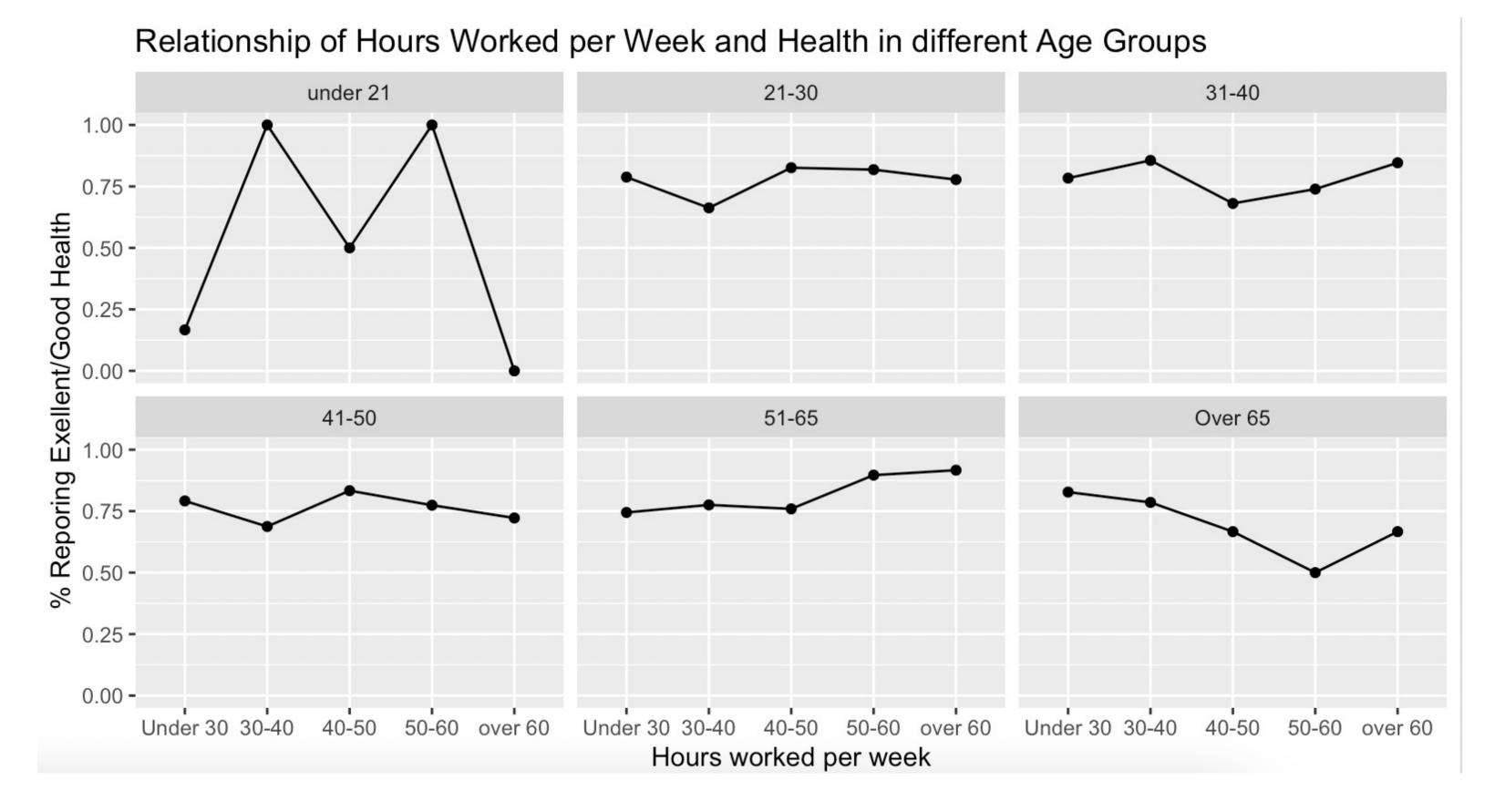
### Multivariate

Logistic regression
 analyses showed the
 effects of age on health

Relationship of Hours Worked per Week and Health in different Age Groups



**Figure 1:** The Proportion of Health Ratings across different Ages and Hours Worked



The analysis shows no significant impact of age or weekly working hours on health outcomes (p-values: age = 0.420, hours worked = 0.574) in this population, suggesting that other unexamined factors may be more influential in affecting perceived health.

- Further research should be done to understand the relationship between
   workers under 21 and working over 60, as
   0% of participants in this group reported
   they had good or excellent health (Figure 2).
- Workers over the age of 65 working 40-50 hours reported they had poor health more than any other group (Figure 1).
- The subjectivity and lack of specificity of the question "Would you say your own health,

outcomes (p = 0.420) and the number of hours
worked (p = 0.574) were
not statistically significant.
Additionally, the

interaction between age and hours worked **did not significantly** affect health outcomes (p = 0.757), showing that the impact of work hours on health is consistent across different age groups in this dataset.

Figure 2: Percentage of Participants Reporting Good or Excellent Health Across Different Ages and Hours Worked in general, is excellent, good, fair or poor?" may provide misrepresentative results of individuals actual health.

# References

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Ferguson, J. M., et al. (2023). "Distribution of working hour characteristics by race, age, gender, and shift schedule among U.S. manufacturing workers." <u>Chronobiology international</u> 40(3): 310-323.

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