

Women's Participation in the Canadian Workforce

Introduction:

The participation of women in the workforce is a very interesting topic as there are many different factors that can influence whether a woman decides to work or not. In many societies, women are only expected to work until married, at which point they are told to become housewives. This has had a significant influence on the participation of women in the workforce and has led many factors that deter women from working including lower pay, segregation and less benefits. According to Statistics Canada, in 2011 an average female full-time worker made 74% of what an average male full-time worker made.

Additionally, cultural beliefs and societal biases have played a role in women's participation including the idea that when a family has to choose, they are more likely to send a boy to school than a girl. This along with media influences such as stereotypes about women working styles has led to men dominance. In many forms of media, women are viewed as submissive, dependent, gullible and thus a man is viewed as better for the position since he is dominant, independent, etc. This leads to many feminist views in the issue regarding inequality and the glass ceiling effect; the idea that in many workplaces, women are viewed as the inferior gender. Statistically, only 18 of the top fortune 500 CEO's are female and only 22 of the top 197 global leaders are women.

This brings us to our case study and how we can interpret the influences of women's participation in Canada. Using our data set, Canadian Women in the Labour Force, we decided to focus on the impacts husband's income, presence of children and geographical locations has on a woman working full-time, part-time, or not at all. Our motivation was to determine whether there are any significant factors that lead to some sort of explanation in a woman's work status. With 1,200 randomly selected Canadian adult women (263 respondents in the data) we narrowed our questions of interest down to the following:

1. Is the likelihood of women participating in the labour force affected by any of the following factors: husband's income, presence of children in the household and geographical region?
2. Are women more likely to work full-time if husband's income is lower?
3. Does women's participation in the labor force vary by region?
4. Are mothers less likely to work full-time?

With these questions of interest in hand we were able to choose which model would best answer our questions which will be discussed in the next section.

Model Variables:

The original data set contained 4 variables: participation, husband's income, the absence or presence of children, and the region of Canada that the respondent was from. The response variable was participation, which is what our group called the "work status. The participation variable was categorical, and contained the values fulltime (full-time work), parttime (part-time work), and notwork (not working). The variable of husband's income was quantitative and it was measured in \$1000s of dollars. The presence of children was a binary categorical variable, where the only values (responses) were present or absent. The region variable was categorical and contained the values of five regions within Canada: BC, ON, QC, Atlantic, and Prairie. Logically, the work status is the response variable, and depends on the husband's income, presence of children, and the region of Canada that the respondent is from.

Interpretation of Analysis:

After studying the model, we had several findings which identify the factors that affect women in the labour force. A women with no children and no income from their husband had an 85% probability working full-time. Moreover, compared to a women with no children, a mother has 92% reduced odds of working full-time. And for each \$1,000 increase in husband's income, the odds of a women working full-time decreases by 9.4%, when the presence of children is held constant.

Conclusion:

We found that there is strong evidence to support that presence of children and husband's income are related to women participating full-time in the labour force. An increase in husband's income is related to a decrease in the likelihood of a woman working full-time. We also showed that there is no sufficient evidence for the relationship between region and women's level of work participation. Finally, there is overwhelming evidence to show that mother's are less likely to participate in full-time work.

In terms of recommendations, our findings showed that there might be other variables needed to improve our model. Possible improvements we would suggest for further sampling are larger sample size (allows for binomial modelling), finding the number of children each woman has, age of youngest child, education level (of woman and husband), and area type (urban, suburban, rural). A possible enhancement to the response variable is the number of hours of worked by each woman.

Appendix

- **Introduction Bibliography**

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