

Canadian Females in Two-Parent Households Spend More Time than Males on Childcare Irrespective of Income Level*

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Abstract

While gender equality in North America has improved incrementally over the past decades, Canadian females today remain disproportionately responsible for providing unpaid childcare labour. Even as substantially more women join the Canadian labour force, men consistently spend less time caring for their children than women, irrespective of earnings. In this paper, the time spent by Canadian males and females caring for young children and others is analysed to assess the extent of disparities in care time, and the effect of personal and household earnings on childcare. At all levels of personal income, females are found to spend more time on average caring for young children than men, including cases where the female is the sole earner in their household.

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*Code and data are available at: <https://github.com/EthanSansom/gssgenderedchildcare>

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1 Introduction

In spite of decades of gradual progress on gender equality in North America and a drastic increase in female labour force participation, Canadian females today bear a much larger childcare burden than Canadian males (Shafer, Scheibling, and Milkie 2020). In 2015, Canadian mothers on average were found to have spent around 30% more time on housework than fathers, and 40% more time on childcare (Moyser and Burlock 2018). In their paper analyzing gender inequality in Canadian childcare during the pandemic, authors Johnston, Mohammed, and Van der Linden (2020) note that women spend a greater amount of time on childcare than men, regardless of time spent on paid employment. Further, they find that during the COVID-19 pandemic, the average Canadian woman with children at home reported spending almost 50 hours more per week on child care than was reported by the average Canadian man (Johnston, Mohammed, and Van der Linden 2020).

Moyser and Burlock (2018) identify several commonly cited theoretical justifications of the gendered division of labour in Canada. For instance, gendered division of childcare labour may result from the expression of so-called “appropriate” gender norms by both males and females, as are enforced by social, cultural, and institutional pressures (Moyser and Burlock 2018). Females, even those who are the primary income earners in their household, may take on additional childcare tasks to adhere to social constructs of women as caregivers (Johnston, Mohammed, and Van der Linden 2020). Alternatively, the gendered division childcare labour has been theorized as an economically rational allocation of a household’s time resources, based on the earning potential of each parent or caregiver (Moyser and Burlock 2018). Under this framework, a dual parent household attempting to maximize their income would allocate the majority of childcare time and labour to the parent with the lowest earnings or educational attainment, while the other parent is responsible for providing the household with income. Moreover, the parent with higher earning potential may leverage their economic power to avoid childcare responsibilities at home, forcing their partner to take over the childcare role (Moyser and Burlock 2018). If this theory holds true, then gendered differences in childcare time expenditure would be expected to diminish for females with high levels of income and for females who are the sole income earners within their households. Further, both males and females would experience similar declines in personal childcare labour and time use as their incomes increased.

To assess the validity of the theory of economically rational household labour allocation, this paper investigates the time spent on childcare and other care activities in the Canadian population. Using data collected from the 2015 Canadian General Social Survey (GSS) on Time Use (Statistics Canada 2017a), this paper compares time spent on the care of young children, and on care related activities more generally, by Canadian males and females in comparable income categories. In particular, the paper analyses time spent on care by males and females with low personal income levels (\$20,000 Canadian dollars or below), with high personal income levels (\$140,000 Canadian dollars or above), and the duration of care time spent by males and females who are the sole income earners within their household. At all levels of income detailed in the GSS, females on average spend more time on both the care of young children (aged 14 and below) and on care in general compared to males. Consistent with the theory of rational household labour allocation, males and females both experience similar declines in childcare duration as income increases. Females who are the sole income earners in their households, however, are shown to spend more time on average caring for young children than male sole income earners, and are much more likely to spend greater than 100 minutes a day on childcare. Even in cases where Canadian females clearly possess higher earnings potential relative

to their partner, gendered differences in household childcare allocation persist, contradicting the theory of rational household labour allocation.

In the remaining sections of this paper, a detailed review of the data collection process used to implement the 2015 Canadian GSS on Time Use is provided, followed by a description of the specific subset of data used to conduct this investigation. Utilizing this data, differences in childcare and general care time use between Canadian males and females are then depicted and discussed in the broader context of gendered discrepancies in unpaid care labour. The paper concludes with a discussion of its limitations. In the appendix, a supplementary survey to the 2015 Canadian GSS on Time Use is proposed to improve subsequent analyses. The R statistical software (R Core Team 2021) is used to load, clean, and visualize the data in this paper, as well as to compile the paper itself. The `tidyverse` (Wickham 2021) and `dplyr` (Wickham, François, et al. 2021) are used to manipulating data, while `cowplot` (Wilke 2020), `ggplot2` (Wickham, Chang, et al. 2021), `gridExtra` (Auguie 2017), and `kableExtra` (Zhu 2021) are used to create nicely formatted graphs and tables. Additionally, packages `modelsummary` (Arel-Bundock 2022) and `estimatr` (Blair et al. 2022) are used to generate summary tables. The package `here` (Müller 2020) is used for directory file path management. Finally, `bookdown` (Xie 2021a), `knitr` (Xie 2021b), and `tinytex` (Xie 2021c) are used to format and compile this paper.

2 Data Collection

2.1 Survey Description

The Canadian General Social Survey on Time Use, first conducted in 1986 and repeated every five to six years, provides data on how the Canadian population manages their time each day and how their time use contributes to personal well-being (Statistics Canada 2017c, 2017b). The 2015 time use survey contains a standard set of socio-demographic questions regarding sex, age, income level, family structure, and location, as well as qualitative questions on respondents' perceptions of commuting, labour, unpaid work, community, and time use (Statistics Canada 2017b, 2019). To collect quantitative data on Canadians' time use, respondents are also asked to chronologically record all activities (lasting greater than ten minutes) for a single 24-hour period (Statistics Canada 2019).

2.2 Population

The target population of the survey are all non-institutionalized individuals, aged 15 years or older, residing within the Canadian provinces. Notably, this population criteria excludes all individuals living in the three Canadian territories, Yukon, Northwest Territories, and Nunavut (Turcotte, Wendt, and Houle 2017). Of the Canadian provinces and territories, these regions have the highest proportion of Indigenous peoples in their populations (Government of Canada 2020). In 2016, the populations of Yukon, the Northwest Territories, and Nunavut were 23%, 51%, and 86% Indigenous respectively, compared to 18% in Saskatchewan, the province with the largest proportion Indigenous population (Government of Canada 2020). Systems in place for collecting statistics on Indigenous peoples in Canada are less robust than those for other demographics (OECD 2020). Canadian census data for instance has under sampled populations in the territories, relative to the provinces, in censuses from 1991 to 2016 (Government of Canada 2020; Bérard-Chagnon and Parent 2021). Data from the 2015 GSS on Time Use then, produces estimates that cannot be extrapolated to the entire Canadian Indigenous population, as this data is collected from samples which are both not representative of the Canadian Indigenous population and which contain relatively few members of the Indigenous population (Bérard-Chagnon and Parent 2021). The failure of Canadian Statistical Agencies to collect representative data on Indigenous populations, deprives these groups of the insights and services which result from the analysis of socio-economic, demographic, and other data.

2.3 Frame

The 2015 time use survey was generally conducted over telephone, and the survey frame likewise consists of a set of Canadian landline and cellular telephone numbers (Turcotte, Wendt, and Houle 2017). Unlike prior GSS's on time use, which were conducted by dialing random telephone digits and which did not include cellphone numbers, the 2015 time use survey frame was constructed via two linked sources of telephone numbers (Turcotte, Wendt, and Houle 2017). The first source used was the list of all landline and cellular telephone numbers in use, which were available to Statistics Canada from census data and telecommunication companies (Turcotte, Wendt, and Houle 2017). Secondly, the Address Registrar, a dataset of all dwellings within the provinces, was used to associate groups of telephone numbers with a individual household (Turcotte, Wendt, and Houle 2017). Of the telephone numbers available, 87% were associated with an address in the registrar (Turcotte, Wendt, and Houle 2017). The remaining 13% of telephone numbers not associated with an address were considered as single records of a potential household (Turcotte, Wendt, and Houle 2017). The innovation of linking telephone numbers to houses in the 2015 survey prevents repeated counting of single households with multiple linked telephone numbers in the survey data and increases coverage of households without landlines, both resulting in a survey frame which is more representative of the Canadian population than previous GSS cycles on Time Use (Turcotte, Wendt, and Houle 2017).

2.4 Stratification

To select a sample representative of the Canadian population, the 2015 GSS on Time Use employs a geographically stratified sample design (Statistics Canada 2017b). The Canadian provinces containing the survey population are partitioned into 27 geographical areas (strata), into which households and individual cellphones (not linked to a household) from the survey frame are sorted (Turcotte, Wendt, and Houle 2017). Several of the 27 strata are individual Census Metropolitan Areas, including Regina, Saskatoon, Calgary, Edmonton, Toronto, Ottawa, Hamilton, Montreal, Quebec City, St. John's, Halifax, Saint John, and Vancouver (Turcotte, Wendt, and Houle 2017). To ensure sufficient sample sizes for precise estimates at both the national and strata-level, the survey was carried out until pre-identified minimum sample sizes from each strata were attained (Turcotte, Wendt, and Houle 2017). Additionally, this measure ensures that survey data is representative of populations across the Canadian provinces.

2.5 Sampling

Within each strata, a simple random sample (without replacement) of household and telephone records from within the frame was selected (Turcotte, Wendt, and Houle 2017). The data collection for the 2015 time use survey took place between April 7th 2015 and April 6th 2016. Selected records associated with a household were mailed a contact letter prior to the survey date (Statistics Canada 2017b). Additionally, these and all other records were contacted via telephone to confirm participation in the survey (Statistics Canada 2017b). Within households that consented to be surveyed, a single eligible house member within the survey population was randomly selected to be surveyed (Turcotte, Wendt, and Houle 2017).

A total of 45,534 telephone numbers within the frame were contacted, out of which 17,390 responded to and completed the survey (Turcotte, Wendt, and Houle 2017). The high non-response rate associated with the 2015 GSS on Time Use, which demanded a significant time investment on the behalf of respondents to record their activities for 24-hour period, limited the sample size of the survey to below the target sample size of 22,000 (Turcotte, Wendt, and Houle 2017). Such limitations may reduce the precision of estimates made using the survey data, by consequence of reduced sample size, and limits extrapolation of the results to the full Canadian population, via selection bias of survey respondents into the sample. In particular, non-response rates varied by certain demographics within the population (Turcotte, Wendt, and Houle 2017). For instance, non-respondents were more likely to be younger (aged 15-24) and to identify as male (Turcotte, Wendt, and Houle 2017). Consequently, young males are underrepresented in the sample as compared to the population of young males in the Canadian provinces, threatening the external validity of estimates derived from the sample.

2.6 Non-Response and Imputation

To mitigate the negative consequences of high non-response rates to the 2015 time use survey, individual survey respondents were provided a weight (Statistics Canada 2017b; Turcotte, Wendt, and Houle 2017). Subsequent estimations using the survey data use these weights to make some respondents' data more influential in the estimate than that of other respondents (Turcotte, Wendt, and Houle 2017). This measure was taken to ensure that the data obtained from the survey was as representative of the survey's target population as possible. The weight of each respondent was determined using demographic characteristics of the respondent and known characteristics of non-respondents (Statistics Canada 2017b). For instance, the weights of respondents from British Columbia, where non-response was known to be high, were increased to accurately represent the proportion of the target population which resided in British Columbia (Statistics Canada 2017b). Several other characteristics, such as age, sex, and income level, were used to adjust respondents' weights and provide a more representative sample of the target population (Statistics Canada 2017b; Turcotte, Wendt, and Houle 2017). Summary statistics and plots which appear throughout this paper are computed using these survey weights, as is recommended by Statistics Canada (Turcotte, Wendt, and Houle 2017).

Because respondent weights are calculated using a set of characteristics of each respondent, non-response was not permitted for certain survey questions regarding sex, income, and other variables used for weighting (Turcotte, Wendt, and Houle 2017). In the cases where the sex of the survey respondent was missing, values were imputed (inferred) from examination of their survey responses and available household data (Turcotte, Wendt, and Houle 2017). Income information was obtained from 2014 tax filings 88.6% of respondents, and was used to identify respondents' personal and household income in the case of non-response. The use of tax data was particularly influential in mitigating non-response bias, as income related survey questions are often sensitive and are subject to high rates of non-response (Statistics Canada 2017c). Where income data was unavailable, respondents' income information was imputed as well (Turcotte, Wendt, and Houle 2017).

2.7 Survey Design

The 2015 time use survey was primarily conducted via telephone interview, and in some cases via a combination of telephone interview and digital survey (Statistics Canada 2017b; Turcotte, Wendt, and Houle 2017). The interview style was conversational, and therefore reduced the need of survey respondents to independently interpret the meaning of survey questions (Turcotte, Wendt, and Houle 2017). The full set of questions and valid responses included in the survey are included in Appendix Figure 7. All respondents were able to conduct their interview in either French or English, but interviewers were allowed to conduct interviews in other languages in which they were fluent (upon the request of the respondent) (Statistics Canada 2017b). The average telephone survey took 45 minutes to complete (Statistics Canada 2017b).

Prior to the implementation of the survey on 2015, Statistics Canada's Questionnaire Design Resource Center (QDRC) carried out practice surveys in four cities within three provinces (Statistics Canada 2017b). Using the feedback of respondents and advice from the QDRC, the time use survey was edited for clarity and relevance (Statistics Canada 2017b). For the assurance of quality data collection, interviewers were trained in advance of survey implementation and during interviews were assisted by Computer Assisted Telephone Interviewing (CATI) software (Statistics Canada 2017b). The CATI software was used to edit the flow of the interview and questionnaire dependent on survey responses (Statistics Canada 2017b). For example, CATI may not prompt an interviewer to discuss the marital status of a respondent, if that respondent had previously identified as single. Such intervention reduces errors and misinterpretations which result from posing survey questions not relevant to the respondent. CATI software was further used to allow interviewers to enter data during the interview and to prevent interviewers from entering values which were out of range (Statistics Canada 2017b). The software, for example, may prevent negative integer values of respondent age from being recorded by interviewers. This intervention further reduces the chance of recording incorrect data which would invalidate the survey results. An additional series of checks were performed after data collection to verify its accuracy, using available data on survey respondents (Statistics Canada 2017b). Self-reported

ages from the survey for example were compared to known birthdates of the respondents (Statistics Canada 2017b).

While many aspects of the survey were common to national surveys, such as questions on sex, age, and income status, the 2015 time use survey featured a novel set of questions regarding respondents' time use over the course of a single day (Statistics Canada 2017b). In particular, survey respondents were asked, prior to completion of the survey, to keep a record of all activities, as well as the time and the duration of said activities, in a 24-hour period beginning at 4:00 AM in the respondents' time zone (Statistics Canada 2017c; Turcotte, Wendt, and Houle 2017). Respondents were asked to report activities with durations of at least 10 minutes and were permitted to report up to two simultaneous tasks (Statistics Canada 2017c; Turcotte, Wendt, and Houle 2017). In addition, respondents were asked where they were during each activity, who they were with (if anyone), and whether or not they used any information technology (such as a computer) during the activity (Statistics Canada 2017c). Such reporting requires a significant amount of time on the behalf of the respondent, and the reported durations, activities, and locations are subject to measurement errors from rounding, forgetfulness, and failure to record on part of the interviewee. As such, survey data on time use may produce significantly biased estimates of population parameters regarding Canadians' time use.

3 Data Description

3.1 Selected Variables

This paper utilizes a subset of data collected by the 2015 Canadian GSS on Time Use. In particular, only the subset of 3235 respondents living with a spouse/partner, and children below the age of 25, are considered. Restricting the sample to this block controls for factors such as lack of spousal childcare support or additional childcare support from other family members living in the home, both of which effect the childcare time spent by survey respondents. In addition, only variables pertaining to the duration of respondent time use and income generating activities are considered in the analysis. Demographic variables for sex as well as personal and household income level¹ are also included. Table 2 provides a full description of all variables which are used for this investigation.

Table 1: Description of Variables

Variable Name	Description
Sex	The sex of the respondent
Weight	Weight assigned to each observation, used for computing population estimates
Personal Income Group	Personal income of respondent
Household Income Group	Household income of respondent
Income Difference	Difference in respondent’s household and personal income
Paid Work	Duration of paid work, including paid training and other income sources
Care of Children 14 and Below	Duration caring for children in household aged 14 years and under
Accompanying Children 14 and Below	Duration accompanying children in household aged 14 years and under
Care of Children 15 and Above	Duration caring for children in household aged 15 years and above
Accompanying Children 15 and Above	Duration accompanying children in household aged 15 years and above
Care of Children Total	Duration caring for all children in household
Accompanying Children Total	Duration accompanying all children in household
Care of Other Adult	Duration caring for another adult in household
Accompanying Other Adult	Duration accompanying another adult in household
Care and Accompanying of Children (Out of House)	Duration caring for and accompanying children in other households
Care of Other Adult (Out of House)	Duration caring for another adult in other household
Accompanying Other Adult (Out of House)	Duration accompanying another adult in other household
Accompanying and Care Total	Duration of all care and accompanying

^a All durations are measured in minutes per 24-hour period starting at 4:00 AM.

The 2015 Canadian GSS on Time Use distinguishes between direct care activities, such as reading to a child, and accompanying activities, such as walking a child to a bus stop (Turcotte, Wendt, and Houle 2017). Additionally, variables such as *Care of Other Adult* and *Care of Other Adult (Out of House)* respectively distinguish between time spent caring for an adult that lives in a respondent’s home and time spent caring for an adult living in a different house. All durations are measured in minutes spent on an activity within a 24-hour period.

Table 2: Sample of GSS Time Use Data

Sex	Weight	Personal Income Group	Household Income Group	Care of Children Total	Paid Work
Female	371.752	\$40,000 to \$59,999	\$140,000 or more	60	480
Female	2479.299	\$20,000 to \$39,999	\$60,000 to \$79,999	50	410
Female	284.989	\$40,000 to \$59,999	\$140,000 or more	144	441
Female	1227.667	\$20,000 to \$39,999	\$80,000 to \$99,999	60	480
Male	3309.128	Less than \$20,000	\$20,000 to \$39,999	285	0

¹All incomes are reported before tax.

Table 2 depicts a selection of five observations as they appear in the data (with variables omitted for clarity). As discussed in Section 2.6, observations are provided a *Weight* used to compute estimations and models using the GSS data (Turcotte, Wendt, and Houle 2017). These weights adjust the survey data to be more representative of the Canadian population (Turcotte, Wendt, and Houle 2017).

3.2 Data Analysis

Table 3 displays the weighted mean and standard deviations of time use variables by sex.

Table 3: Duration of Care Related Activities and Paid Work by Sex of Respondent

	Females (N=1711)		Males (N=1524)	
	Mean	Std. Dev.	Mean	Std. Dev.
Panel A: Care Time Spent on Individuals within Household				
Care of Children 14 and Below	70.8	122.8	38.5	80.4
Accompanying Children 14 and Below	7.0	29.3	5.4	28.3
Care of Children 15 and Above	3.2	17.1	1.2	11.8
Accompanying Children 15 and Above	1.6	13.9	0.9	12.1
Care of Children Total	73.9	122.9	39.7	81.2
Accompanying Children Total	8.6	32.7	6.3	31.2
Care of Other Adult	1.1	12.4	0.4	4.6
Accompanying Other Adult	0.8	15.4	0.5	6.9
Panel B: Care Time Spent on Individuals outside of Household				
Care and Accompanying of Children (Out of House)	1.9	19.9	2.4	32.1
Care of Other Adult (Out of House)	0.5	5.7	0.2	4.9
Accompanying Other Adult (Out of House)	0.8	10.3	0.1	2.2
Panel C: Total Time Spent on Care and Paid Work				
Accompanying and Care Total	87.7	132.4	49.5	93.0
Paid Work	204.3	242.1	315.0	275.2

^a All means and standard deviations are calculated using weighted observations.

Notably, nearly all childcare time spent by both males and females is on the care of children aged 14 and below within their own household. On average, Canadian females spent 70.8 minutes on young in household childcare per day, compared to 38.5 minutes for Canadian men. In contrast, an average of only 8.6 and 6.3 minutes per day were spent by females and males respectively accompanying children in the household of any age. The average time spent caring for adults and children of other households is negligible by comparison. Time spent on these tasks, however, is highly variable. While females and males respectively spent just 1.9 and 2.4 minutes accompanying and caring for children of other households, the standard deviation of time spent on this task was 19.9 minutes for females and 32.1 minutes for males. The average time spent on paid work for females and males was 204.3 and 315.0 minutes respectively, with relatively large standard deviations of 242.1 and 275.2 minutes.

Figure 1 plots the duration of all care and accompanying activities versus the duration of paid work by sex.

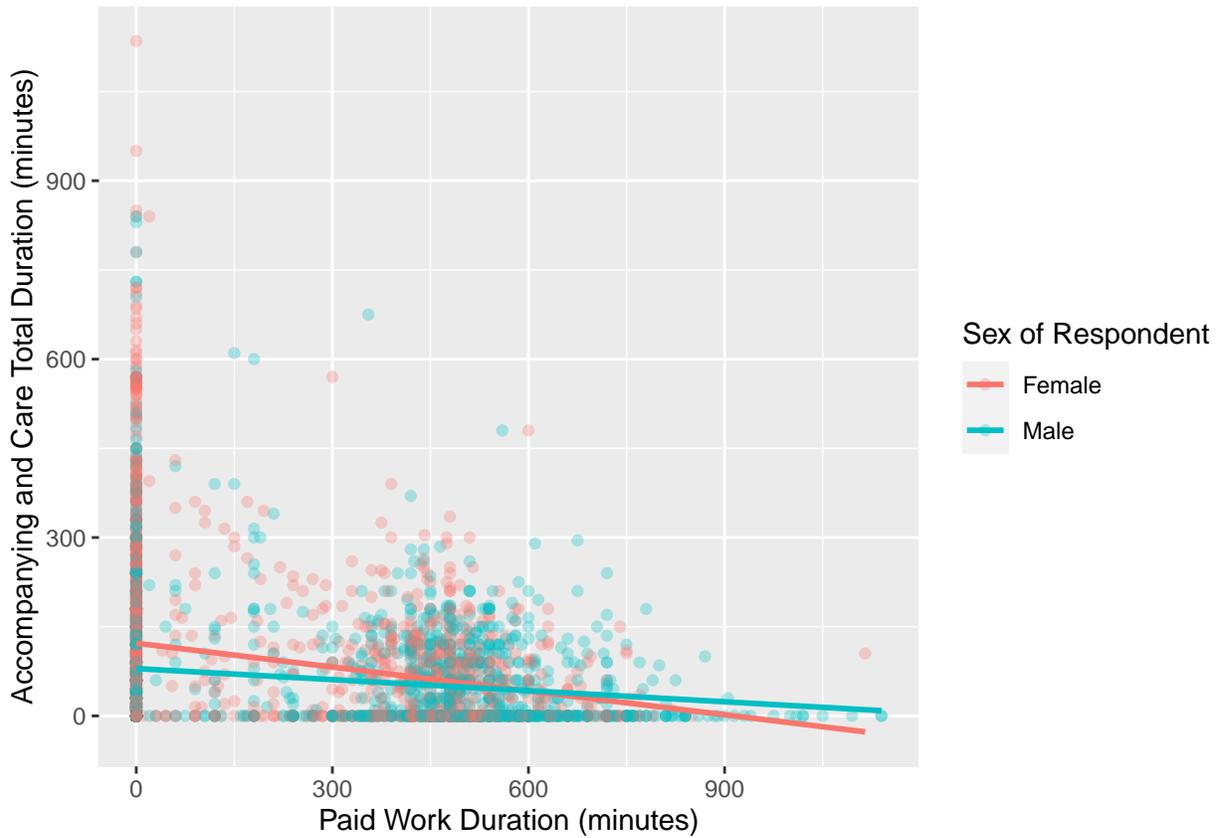


Figure 1: Duration of All Care and Accompanying Activities versus Duration of Paid Work

Both Canadian males and females experience a decline in time spent on care and accompanying as their time spent on paid work increases. There does not appear to be a significant difference in the rate of this decline between the sexes. The majority of individuals in the sample spending a very large amount of time, greater than ten hours, on daily care and accompanying are females with 0 minutes of time spent on paid work. Likewise, the majority of individuals spending a large amount of time on paid work, greater than 720 minutes or 12 hours, are men with relatively low or 0 minutes spent on care and accompanying activities.

Figure 2 plots the average time spent on caring for children 14 years and below within the household by income and sex.

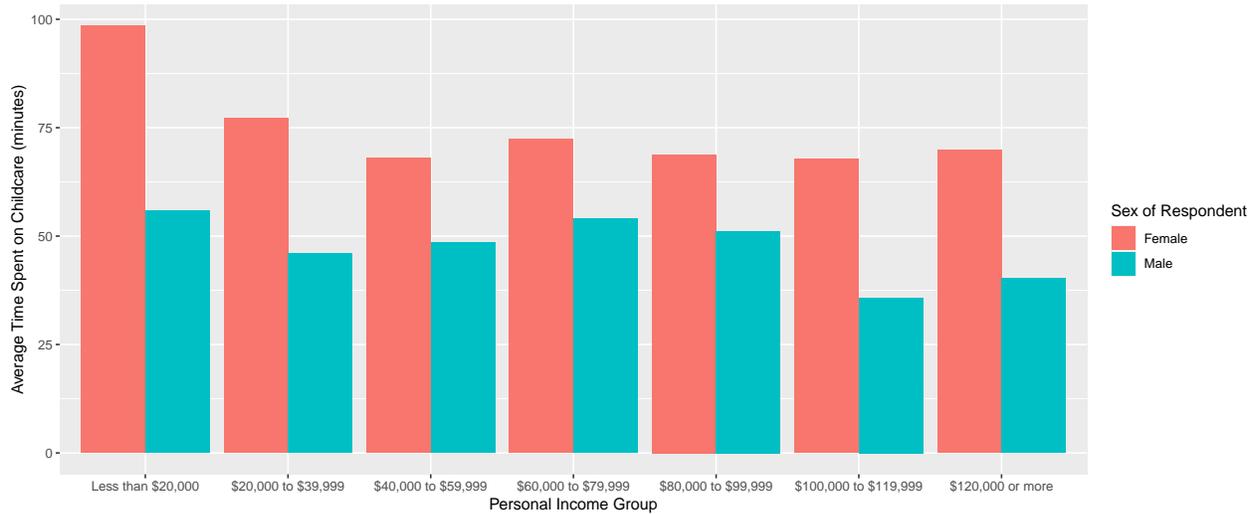


Figure 2: Average Time Spent on Young Childcare by Sex and Personal Income Group

At all income levels females spend substantially more time on average caring for young children in the household than males. This disparity is most evident in the lowest income group, earners with annual income of \$20,000 or less, where females spend nearly twice as much time on childcare as males. Both females and males experience declines in young childcare time as their income level decreases. Moreover, time spent on childcare appears to decrease by around the same proportion for females and males as income increases. Even among respondents who earn the majority of their household income, females still spend significantly more time on the care of young children in the household, as shown in Figure 3.

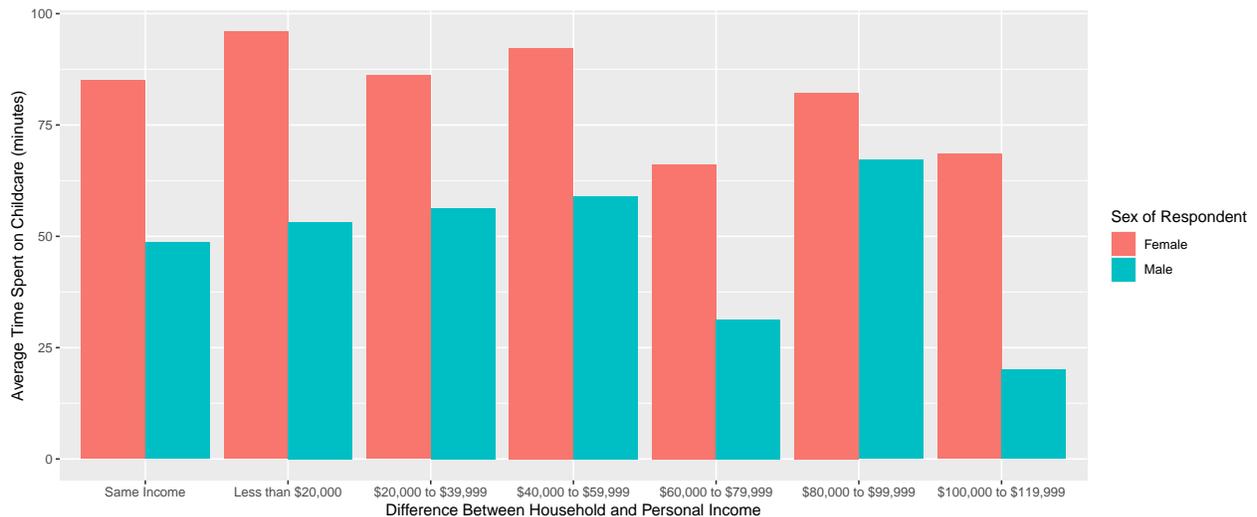


Figure 3: Average Time Spent on Childcare by Sex and Household Income Difference

On average, females who are the sole household earners, those with no difference in personal and household income, spend around 30 more minutes per day caring for young children in the household than male sole household earners. At all levels of income differences, females spend substantially more time on average

caring for young children than males. This difference is most pronounced, however, when personal income is significantly lower than household income (\$100,000 to \$119,999 less).

4 Results

4.1 Paid Work and Income

At every level of income, and every difference of household and personal income level, females on average spend substantially more time than males caring for children aged 14 and below within the household, as shown in Figure 2 and Figure 3. Both sexes experience similar proportionate decreases to childcare time as their incomes decrease. Moreover, the decline in childcare resulting from increased duration of paid work time is similar for both females and males.

4.2 Household Earnings Structure

As demonstrated in Figure 3, among sole household earners, females spend more time on average than males caring for young children in the household. Likewise, even at the highest level of income, those with earnings greater than \$140,000 per year, the inequality between female and male childcare duration persists on average. To better understand the gender differences in childcare time expenditure, Figure 4 plots the distribution of young childcare time use for males and females in the sample at any income level, the lowest and highest income levels, and among sole household earners.

The majority of individuals, both male and female, appear to spend fewer than 60 minutes or an hour day caring for young children in their household. Females, however, are much more likely to be in the minority of individuals spending 100 minutes or more on childcare daily. This is particularly evident in the case of sole household earners, among whom females are much more likely than males to be spending between 100 to 400 minutes caring for young children. This is also the case for individuals with personal income of \$20,000 or less, and to a lesser extent for individuals with personal income of \$140,000 or more. Canadian females generally appear much more likely than males to spend exceptionally large amounts of time caring for young children in their home.

Figure 5 plots the distribution of all care and accompanying time use for males and females in the sample at any income level, the lowest and highest income levels, and among sole household earners.

Similar to the results shown in Figure 4, females are generally more likely than males to spend greater than 100 hours on care and accompanying activities daily. Females are not uniformly overrepresented at greater level of care and accompanying time, as was the case for greater levels of young childcare. In the group of sole income earners, for instance, a greater proportion of males spend between 100 to 200 hours on care and accompanying activities than females.

These results and those in Figure 4, however, should be considered with caution. A very small proportion of the sample, just 61 females and 136 males, are sole household earners². Likewise, only 66 females and 239 males have an annual personal income of \$140,000 or more. As such, population estimates of time use based on these samples are likely imprecise and are not necessarily representative of the actual population.

²Counts and percentages of the sample at each income level can be found in Appendix Table 4

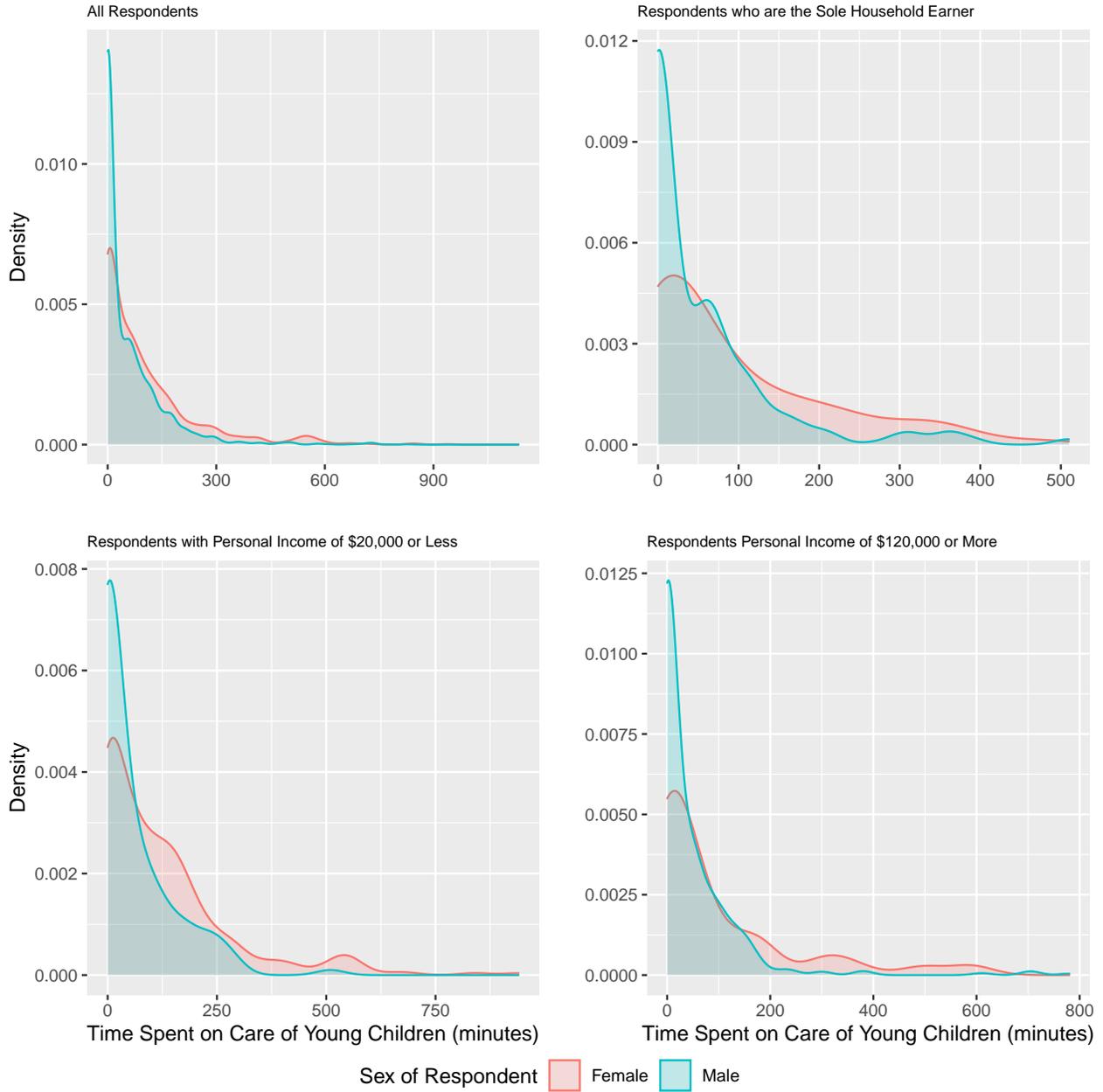


Figure 4: Daily Time Spent on Personal Care of Young Children (14 Years Old and Under) by Sex and Personal Income Group

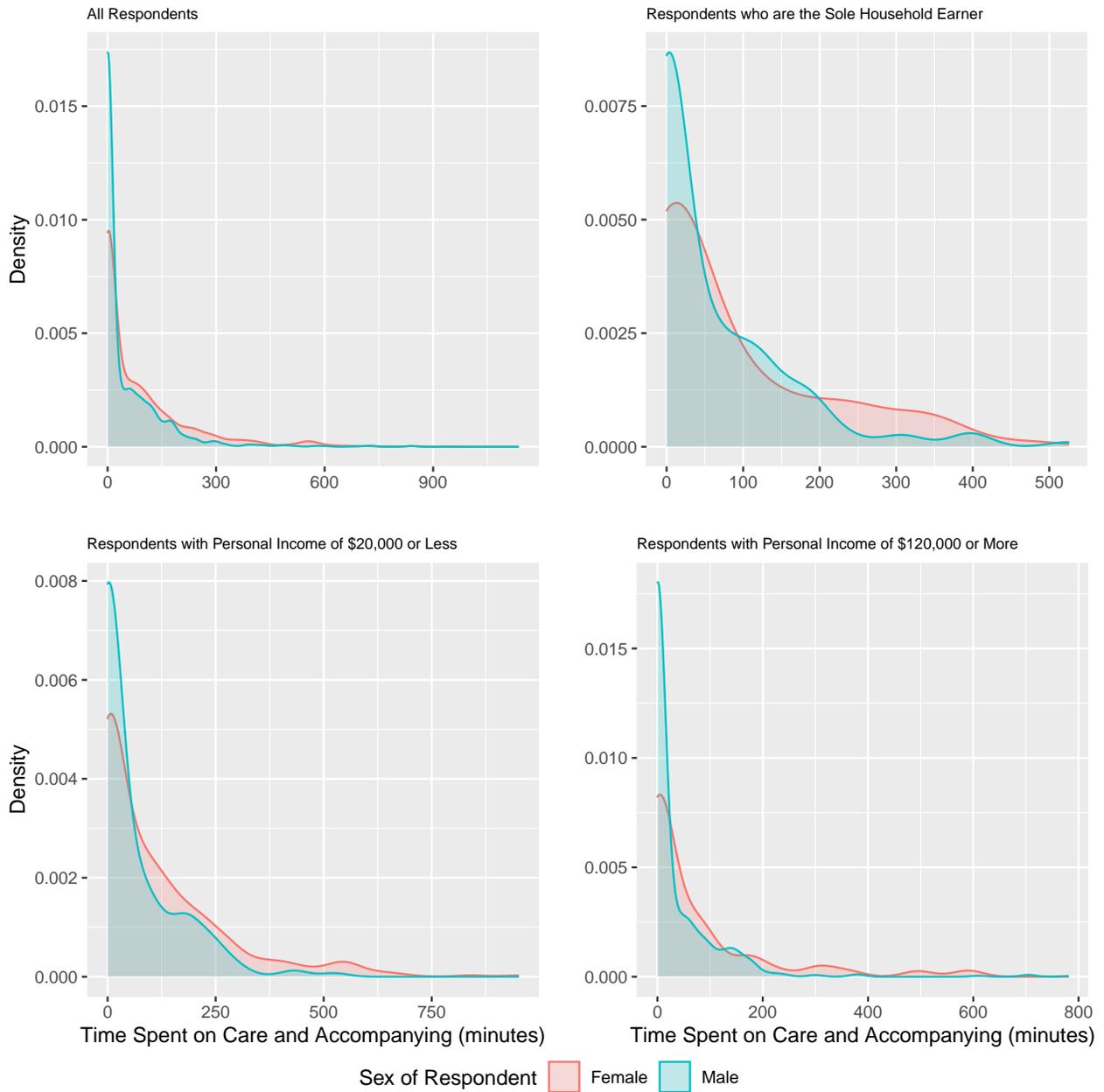


Figure 5: Daily Time Spent on Care and Accompanying by Sex and Personal Income Group

5 Discussion

5.1 Gendered Inequalities in Time Use

As shown in Figure 2, Canadian females at every income level spend more time on average caring for children aged 14 and under within their household than males. Both females and males, however, experience similar proportionate declines to time spent on childcare as their incomes increase. Likewise, females and males are shown in Figure 1 to substitute time spent on childcare with time spent on paid work at a similar rate. These results are consistent with the theory of rational economic allocation of household childcare, in which both males and females would be expected to reduce their childcare labour as their earnings increased irrespective of sex. The persistent difference in child care duration within income levels, however, is not explained by this theory.

Figure 4 demonstrates that differences in mean child care duration across sexes is influenced by a large minority of females who spend greater than 100 minutes per day caring for young children in their households. This greater distribution of female respondents spending 100 minutes or more caring for their young children, a duration of childcare far above the mean level for both males and females in the sample, is consistent with the North American ideology surrounding motherhood and the responsibility of working mothers (Shafer, Scheibling, and Milkie 2020). The expectation of North American mothers to provide more extensive childcare than North American fathers is well documented (Shafer, Scheibling, and Milkie 2020). Among North American mothers, many perceive that childcare requires an extensive personal time commitment on their own behalf and that the needs of their children be placed well before their own (Shafer, Scheibling, and Milkie 2020). Working mothers in particular, have reported facing strong expectations to maintain a high level of childcare and felt guilt at the prospect of delegating time away from childcare tasks towards work (Shafer, Scheibling, and Milkie 2020). These pressures to maintain a high level of childcare, perpetuated by gendered social expectations of work and systematic gender inequalities, are consistent with the overrepresentation of females at the highest levels of childcare duration and overall care observed in Figure 4 (Shafer, Scheibling, and Milkie 2020). Further, the socially-constructed role of women as primary caregivers and nurturers is consistent with the overrepresentation of females at the highest levels of care and accompanying tasks generally, as depicted in Figure 5 (Johnston, Mohammed, and Van der Linden 2020).

This is particularly evident in the distribution of childcare durations for males and females who are the sole household earners. As shown in Figure 4, the proportion of sole household income earning females with a childcare duration greater than 100 minutes is much larger than that of sole household income earning males. The discrepancy between male and female sole earners is consistent with North American ideology that ideal male workers are to have little responsibility for family labour which occurs outside the formal labour market (Williams 2001). Contrary to the theory of household childcare allocation based on potential earnings, even in cases where females are the sole household income earners, and thus possess a substantively greater income than their partner, their childcare time use of remains greater than that of male sole income earners. Other factors then, such as the enforcement of gender norms noted by Moyser and Burlock (2018), are yet required to fully explain the disparities in care between Canadian males and females.

5.2 Paper Limitations

This paper aims to demonstrate that both generally, and within specific categories of household and personal income, Canadian females spend a disproportionately large amount of time on childcare and other care related labour compared to Canadian males. As such, this investigation does not attempt an extensive analysis of the causal determinants of time spent on childcare. Many other factors effecting time spent on care related activities, such as racial and cultural background, age, education level, and number of children are not considered in this paper. Without controlling for these factors, which may differentially relate to sex and childcare duration, it is not possible to accurately portray the true effect of sex on the time spent caring for children or others. The paper does, however, provide motivation to explore more rigorously the root causes of the unequal childcare labour burden held by Canadian women.

As discussed in Section 2, the data used to conduct this investigation, collected via the 2015 Canadian General Social Survey on Time Use, suffers from notable pitfalls which may prevent the results here from being generalized to the Canadian population. High non-response rates to the survey and a limited target population both render the GSS sample somewhat unrepresentative of the true Canadian population. Of the total sample surveyed by the GSS, this paper only considers a small subset of 3235 respondents in two-parent households with children under the age of 25. While the GSS data is weighted, such that computed estimates are more representative of the Canadian population, the weights are not computed for the specific population of two-parent households. It is possible then, that the weights used in this paper may further bias the results presented, rather than accurately adjust the representation of the sample.

Finally, this paper relies on broad measures of both personal and household income, which are capped at upper income thresholds. These measures do not allow for a description of the marginal effect of income gains on time spent on care related activities. Additionally, as shown in Appendix Table 4, in many cases the difference between an individual's personal and household income is not possible to determine. Consequently, the sample of males and females who are sole household income earners (those with a personal income equal to their household income) is relatively small. This further jeopardizes the external validity of the results and the precision of statistics used in this paper.

Appendix

Table 4 summarizes the count and percentage of respondents in the sample at each income level by sex. Note that, for those respondents in the sample for which either their personal income is \$120,000 or more or their household income is \$140,000 dollars or more, it is not possible to determine the size of the difference in personal and household income. As such, these cases are coded as *Ambiguous*.

Table 4: Proportions of Females and Males within Each Income Group

		Female (N=1711)		Male (N=1524)	
		N	Pct.	N	Pct.
Personal Income	Less than \$20,000	438	25.6	127	8.3
	\$20,000 to \$39,999	435	25.4	212	13.9
	\$40,000 to \$59,999	373	21.8	343	22.5
	\$60,000 to \$79,999	195	11.4	285	18.7
	\$80,000 to \$99,999	146	8.5	183	12.0
	\$100,000 to \$119,999	58	3.4	135	8.9
	\$120,000 or more	66	3.9	239	15.7
Household Income	Less than \$20,000	21	1.2	10	0.7
	\$20,000 to \$39,999	76	4.4	59	3.9
	\$40,000 to \$59,999	125	7.3	142	9.3
	\$60,000 to \$79,999	202	11.8	174	11.4
	\$80,000 to \$99,999	236	13.8	209	13.7
	\$100,000 to \$119,999	253	14.8	218	14.3
	\$120,000 to \$139,999	214	12.5	195	12.8
\$140,000 or more	584	34.1	517	33.9	
Income Difference	Same Income	61	3.6	136	8.9
	Less than \$20,000	163	9.5	327	21.5
	\$20,000 to \$39,999	265	15.5	270	17.7
	\$40,000 to \$59,999	309	18.1	153	10.0
	\$60,000 to \$79,999	178	10.4	82	5.4
	\$80,000 to \$99,999	109	6.4	16	1.0
	\$100,000 to \$119,999	39	2.3	6	0.4
Ambiguous	585	34.2	534	35.0	

^a Counts and percentages are unweighted.

Figure 6 displays a supplemental survey designed to augment the 2015 Canadian General Social Survey on Time Use. The primary goal of the survey is to reduce the ambiguity of respondent's personal and spousal/partner income and to determine directly if respondents are the sole earners in their household. By observing the exact reported income of both the respondent and their spouse/partner, the effect of personal, spousal/partner, and household income on the care time expenditures of males and females can be estimated more precisely. Moreover, by asking respondents of their sole household earner status directly, the survey supplement reduces the number of observations lost to ambiguity in the GSS on Time Use, as discussed in Section 5.2.

Additionally, the survey supplement asks respondents to report the amount of time spent on childcare relative to their spouse/partner. This variable allows for the investigation of self-perceived childcare time use compared to actual childcare time use for Canadian males and females.

The supplemental survey can be accessed via the following link <https://forms.gle/Tbr3XnPXTz7GEnaQ7>.

2015 Canadian General Social Survey on Time Use - Income and Time Use Supplement

The 2015 Canadian General Social Survey (GSS) on Time Use is conducted by Statistics Canada to gain insight into how Canadian's manage their time. Researchers and policy makers can use this information to answer important questions such as:

Are Canadian's spending too much time at work?
Do longer commutes effect wellbeing?
Are we spending enough time with our community, family, and friends?
How do demographic factors such as age, location, and gender effect our daily lives?

This supplement to the 2015 Canadian General Social Survey on Time Use is designed to investigate the allocation of childcare tasks within two-parent/guardian households of various income levels. This supplement assumes that the respondent:

A. Is a parent/guardian in a two-parent/guardian household and,
B. Has children below the age of 25 living within their household.

By continuing with this survey you are aware that Statistics Canada will use your responses to gain insight into how Canadian's within two-parent/guardian households manage their time and allocate childcare tasks. Anonymous results of this survey supplement may be used for Statistics Canada reporting, and potentially distributed to other institutions. None of your responses to this survey will be used to contact, track, or otherwise identify your person. Participation in this survey is voluntary and you may choose to skip any question(s) posed to you.

Thank you for your time.

1. What is your sex?

Mark only one oval.

- Female
 Male
 Other
 Prefer not to say

Figure 6: 2015 Canadian General Social Survey on Time Use Supplemental Survey

2. What is the sex of your partner/spouse?

Mark only one oval.

- Female
- Male
- Other
- Prefer not to say

3. What is your personal annual income before taxes?

4. What is the annual income of your spouse/partner before taxes?

5. Are you the sole income earner in your household?

Mark only one oval.

- Yes
- No
- Prefer not to answer
- Don't Know

6. How many hours do you spend on paid work in a typical week?

7. How many hours does your spouse/partner spend on paid work in a typical week?

8. In a typical day, do you spend more time than your spouse/partner caring for children in your household?

Mark only one oval.

- Yes, I spend much more time than my spouse/partner on childcare
- Yes, I spend slightly more time than my spouse/partner on childcare
- No, we spend nearly an equal amount of time on childcare
- No, I spend slightly less time than my spouse/partner on childcare
- No, I spend much less time than my spouse/partner on childcare
- Prefer not to answer
- Don't know

9. On a scale of 1-10, how happy are you with the amount of time you spend caring for children in your household?

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Very Unhappy	<input type="radio"/>	Very Happy									

10. On a scale of 1-10, how happy are you with the amount of time your spouse/partner spends caring for children in your household?

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Very Unhappy	<input type="radio"/>	Very Happy									

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Figure 7 displays the questionnaire used to conduct the 2015 Canadian General Social Survey on Time Use (Statistics Canada 2019).

General Social Survey on Time Use, 2015 2022-03-23, 12:38 AM

- [Work Flexible Schedule \(WFS\)](#)
- [Satisfaction of respondent with current balance between job and home life \(SRC\)](#)
- [Work Life Balance 2 \(WLB\)](#)
- [Household Regularly Hires paid help \(HRH\)](#)
- [Access to transportation \(ATT\)](#)
- [Commute to work \(CTW\)](#)
- [Education Minimum Block with concept \(EDM\)](#)
- [Education - School Attendance v.1 \(ESC1\)](#)
- [Educational Attainment \(EHG2\)](#)
- [Main activity of respondent's spouse/partner \(MAP\)](#)
- [Dwelling of respondent \(DOR\)](#)
- [Length of time respondent has lived in dwelling \(LRD\)](#)
- [Length of time Respondent has lived in Neighbourhood \(LRN\)](#)
- [Length of time respondent has lived in city or local community \(LRC\)](#)
- [Immigration Extended Block \(BPR\)](#)
- [Birthplace of spouse/partner \(BPP\)](#)
- [Aboriginal Minimum \(AMB\)](#)
- [Aboriginal Identity of Spouse/Partner \(AIP\)](#)
- [Population group \(PG\)](#)
- [Visible minority status of respondent's partner \(VMP\)](#)
- [Religion extended \(REE\)](#)
- [Importance of Religion \(RLR\)](#)
- [Language Minimum \(LAN\)](#)
- [Sexual Orientation of Respondent \(SOR\)](#)

Marital Status without Confirmation (De-facto) (MSNC)

MSNC_Q01 What is your marital status?
Are you...?

1: Married

2: Living common-law

3: Widowed

4: Separated

5: Divorced

6: Single, never married

8: RF

9: DK

Relationship to Selected Respondent (RSR)

https://www23.statcan.gc.ca/imdb/p3lnstr.pl?Function=assembleInstr&a=1&lang=en&item_id=217656#qb218258
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Figure 7: 2015 Canadian General Social Survey on Time Use Questionnaire (continued on following pages)

RSR_Q1 What is the relationship...

of: [specific person]

to you?

- 01: [Husband/Wife]
- 02: Common-law partner
- 03: [Father/Mother]
- 04: [Son/Daughter] (birth, adopted or step)
- 05: [Brother/Sister]
- 06: Foster [father/mother]
- 07: Foster [son/daughter]
- 08: [Grandfather/Grandmother]
- 09: [Grandson/Granddaughter]
- 10: In-law
- 11: Other related - Specify
- 12: Unrelated - Specify
- 98: RF
- 99: DK

General Time Use (GTU)**GTU_R110** To start, a few general questions related to time.**GTU_Q110** How often do you feel rushed? Would you say it is...?

- 1: Every day
- 2: A few times a week
- 3: About once a week
- 4: About once a month
- 5: Less than once a month
- 6: Never
- 8: RF
- 9: DK

GTU_Q130 How often do you feel you have time on your hands that you don't know what to do with?

- 1: Every day
- 2: A few times a week
- 3: About once a week
- 4: About once a month

- 5: Less than once a month
- 6: Never
- 8: RF
- 9: DK

Time Use Introduction (TUI)**TUI_R110** To find out exactly how people spend their time, we are going to ask about your activities over a 24-hour period. You will be asked to report activities you had done on [day of the week]. We will start at 4 in the morning because most people are asleep at that time. Please report all activities that lasted at least 10 minutes, including activities such as travelling from place to place.**TUI_Q01** Last [day of the week] at [x:xx AM/PM], what were you doing?**TUI_Q02** How long did you spend on this activity? (Hours/Minutes)**TUI_Q03** Were you doing anything else at the same time?

- 01: Preparing meals
- 02: Eating or drinking
- 03: Housework
- 04: Parenting, care or assistance to others
- 05: Organizing, planning or paying bills
- 06: Pet care
- 07: Social interaction such as talking or conversation
- 08: Social networking or texting, emailing
- 09: Reading
- 10: Watching TV or videos
- 11: Listening to music or radio
- 12: General computer use
- 13: Hobbies
- 14: Other

TUI_Q04 Who was with you?

- 01: On my own
- 02: Spouse, partner
- 03: Household child(ren) - less than 15 years old
- 04: Household child(ren) - 15 years and older
- 05: Parents or parent-in-law
- 06: Other household adult(s)
- 07: Other family member(s) from other households
- 08: Friend(s)

- 09: Colleague(s) or classmate(s)
- 10: Other people

TUI_Q05 Where were you?

- 01: At home or on property
- 02: At place of work or school
- 03: At someone else's home or property
- 04: In the neighbourhood
- 05: Outdoors
- 06: Grocery store, other stores or mall
- 07: Library, museum or theatre
- 08: Sports centre, field or arena
- 09: Restaurant, bar or club
- 10: Place of worship
- 11: Medical, dental or other health clinic
- 12: Elsewhere
- 13: Travel - Car (Driver)
- 14: Travel - Car (Passenger)
- 15: Travel - Walk
- 16: Travel - Bus (includes street cars, metro)
- 17: Travel - Airplane
- 18: Travel - Bicycle
- 19: Travel - Taxi, Limousine Service
- 20: Travel - Boat, ferry
- 21: Travel - Other

TUI_Q06 During this time period, did you use any information technology device such as a tablet, smartphone, computer or laptop?

- 1: Yes
- 2: No

TUI_Q10 On a scale of -3 to +3 where -3 means very unpleasant and +3 means very pleasant; at [xx:xx AM/PM] [(main activity)], how would you rate this moment?

- 1: -3
- 2: -2
- 3: -1
- 4: 0
- 5: +1

- 6: +2
- 7: +3

Time Use Diary (TUT)

TUT_Q970 Was the [day of the week] you described very different from most [same day of the week]?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

DAS sub-module - Time (TIME)

TIME_Q01 You stated that on [day of the week] at 4:00 AM you were sleeping. What time did you fall asleep [the previous] night?

Min = 0; Max = 24

TIME_Q02 You stated that on [day of the week] at 4:00 AM you were sleeping. What time did you fall asleep [the previous] night?

Min = 0; Max = 60

Perception of Time (TCS)

TCS_R110 Now I would like you to answer some questions on your outlook towards your use of time.

TCS_Q110 Do you plan to slow down in the coming year?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

TCS_Q120 Do you consider yourself a workaholic?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

TCS_Q130 When you need more time, do you tend to cut back on your sleep?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

- TCS_Q140** At the end of the day, do you often feel that you have not accomplished what you had set out to do?
1: Yes
2: No
8: RF
9: DK
- TCS_Q150** Do you worry that you don't spend enough time with your family or friends?
1: Yes
2: No
8: RF
9: DK
- TCS_Q160** Do you feel that you're constantly under stress trying to accomplish more than you can handle?
1: Yes
2: No
8: RF
9: DK
- TCS_Q170** Do you feel trapped in a daily routine?
1: Yes
2: No
8: RF
9: DK
- TCS_Q180** Do you feel that you just don't have time for fun any more?
1: Yes
2: No
8: RF
9: DK
- TCS_Q190** Do you often feel under stress when you don't have enough time?
1: Yes
2: No
8: RF
9: DK
- TCS_Q200** Would you like to spend more time alone?
1: Yes

- 2: No
8: RF
9: DK
- Time Spent Texting (TST)**
- TST_Q01** On average, how many text messages do you send per day?
01: 1 to 10 texts
02: 11 to 20 texts
03: 21 to 30 texts
04: 31 to 40 texts
05: 41 to 50 texts
06: 51 to 60 texts
07: Over 60 texts per day
08: I do not send text messages
98: RF
99: DK
- Unpaid Service (UH)**
- UH_Q01** Last week, how many hours did you spend looking after:
... one or more of the children living in your household, without pay?
Min = 0; Max = 168.00
- UH_Q02** (Last week, how many hours did you spend looking after:)
... one or more children living outside your household, without pay?
Min = 0; Max = 168.00
- UH_Q03** Last week, how many hours did you spend doing:
... unpaid housework, yard work or home maintenance for your household?
Min = 0; Max = 95.00
- UH_Q04** (Last week, how many hours did you spend doing:)
... unpaid housework, yard work or home maintenance for persons living outside your household?
Min = 0; Max = 95.00

UH_Q05 Last week, how many hours did you spend:

... providing unpaid care or assistance to one or more seniors living in your household?

Min = 0; Max = 95.00

UH_Q06 (Last week, how many hours did you spend:)

... providing unpaid care or assistance to one or more seniors living outside your household?

Min = 0; Max = 95.00

Subjective Well-being Minimum Block (SLM)

SLM_Q01 Using a scale of 0 to 10 where 0 means "Very dissatisfied" and 10 means "Very satisfied", how do you feel about your life as a whole right now?

0 Very dissatisfied

1 I

2 I

3 I

4 I

5 I

6 I

7 I

8 I

9 V

10 Very satisfied

Min = 0; Max = 10

Self Rated Health (SRH)

SRH_R110 The following set of questions asks about your day-to-day health.

SRH_Q110 In general, would you say your health is...?

1: Excellent

2: Very good

3: Good

4: Fair

5: Poor

8: RF

9: DK

SRH_Q115 In general, would you say your mental health is...?

1: Excellent

2: Very good

3: Good

4: Fair

5: Poor

8: RF

9: DK

Disability Screening Questions - Minimum Block (CATI) (DSQ)

DSQ_R01 The following questions are about difficulties you may have doing certain activities. Please tell me only about difficulties or long-term conditions that have lasted or are expected to last for six months or more.

DSQ_Q01 Do you have any difficulty seeing?

1: No

2: Sometimes

3: Often

4: Always

8: RF

9: DK

DSQ_Q02 Do you wear glasses or contact lenses to improve your vision?

1: Yes

2: No

8: RF

9: DK

DSQ_Q03 With your glasses or contact lenses, which of the following best describes your ability to see? You...?

1: Have no difficulty seeing

2: Have some difficulty (seeing)

3: Have a lot of difficulty (seeing)

4: Are legally blind

5: Are blind

8: RF

9: DK

DSQ_Q04 How often does this [difficulty/condition] limit your daily activities?

1: Never

2: Rarely

- 3: Sometimes
- 4: Often
- 5: Always
- 8: RF
- 9: DK

DSQ_Q05 Do you have any difficulty hearing?

- 1: No
- 2: Sometimes
- 3: Often
- 4: Always
- 8: RF
- 9: DK

DSQ_Q06 Do you use a hearing aid or cochlear implant?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

DSQ_Q07 With your hearing aid or cochlear implant, which of the following best describes your ability to hear? You...?

- 1: Have no difficulty hearing
- 2: Have some difficulty (hearing)
- 3: Have a lot of difficulty (hearing)
- 4: Cannot hear at all
- 5: Are Deaf
- 8: RF
- 9: DK

DSQ_Q08 How often does this [difficulty/condition] limit your daily activities?

- 1: Never
- 2: Rarely
- 3: Sometimes
- 4: Often
- 5: Always
- 8: RF
- 9: DK

DSQ_Q09

Do you have any difficulty walking, using stairs, using your hands or fingers or doing other physical activities?

- 1: No
- 2: Sometimes
- 3: Often
- 4: Always
- 8: RF
- 9: DK

DSQ_R10 The following questions are about your ability to move around, even when using an aid such as a cane.

DSQ_Q10 How much difficulty do you have walking on a flat surface for 15 minutes without resting?

- 1: No difficulty
- 2: Some (difficulty)
- 3: A lot (of difficulty)
- 4: [You/He/She] cannot do at all
- 8: RF
- 9: DK

DSQ_Q11 How much difficulty do you have walking up or down a flight of stairs, about 12 steps without resting?

- 1: No difficulty
- 2: Some (difficulty)
- 3: A lot (of difficulty)
- 4: [You/He/She] cannot do at all
- 8: RF
- 9: DK

DSQ_Q12 How often [does this difficulty walking limit/does this difficulty using stairs limit/does these difficulties limit] your daily activities?

- 1: Never
- 2: Rarely
- 3: Sometimes
- 4: Often
- 5: Always
- 8: RF
- 9: DK

DSQ_Q13 How much difficulty do you have bending down and picking up an object from the floor?

- 1: No difficulty

- 2: Some (difficulty)
- 3: A lot (of difficulty)
- 4: [You/He/She] cannot do at all
- 8: RF
- 9: DK

DSQ_Q14 How much difficulty do you have reaching in any direction, for example, above your head?

- 1: No difficulty
- 2: Some (difficulty)
- 3: A lot (of difficulty)
- 4: [You/He/She] cannot do at all
- 8: RF
- 9: DK

DSQ_Q15 How often [does this difficulty bending down and picking up an object limit/does this difficulty reaching limit/do these difficulties limit] your daily activities?

- 1: Never
- 2: Rarely
- 3: Sometimes
- 4: Often
- 5: Always
- 8: RF
- 9: DK

DSQ_Q16 How much difficulty do you have using your fingers to grasp small objects like a pencil or scissors?

- 1: No difficulty
- 2: Some (difficulty)
- 3: A lot (of difficulty)
- 4: [You/He/She] cannot do at all
- 8: RF
- 9: DK

DSQ_Q17 How often does this difficulty using your fingers limit your daily activities?

- 1: Never
- 2: Rarely
- 3: Sometimes
- 4: Often
- 5: Always
- 8: RF

- 9: DK

DSQ_R18 Please answer for difficulties or long-term conditions that have lasted or are expected to last for six months or more.

DSQ_Q18 Do you have any difficulty learning, remembering or concentrating?

- 1: No
- 2: Sometimes
- 3: Often
- 4: Always
- 8: RF
- 9: DK

DSQ_Q19 Do you think you have a condition that makes it difficult in general for you to learn? This may include learning disabilities such as dyslexia, hyperactivity, attention problems, etc..

- 1: Yes
- 2: No
- 8: RF
- 9: DK

DSQ_Q20 Has a teacher, doctor or other health care professional ever said that you had a learning disability?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

DSQ_Q21 How often are your daily activities limited by this condition?

- 1: Never
- 2: Rarely
- 3: Sometimes
- 4: Often
- 5: Always
- 8: RF
- 9: DK

DSQ_Q22 Has a doctor, psychologist or other health care professional ever said that you had a developmental disability or disorder? This may include Down syndrome, autism, Asperger syndrome, mental impairment due to lack of oxygen at birth, etc..

- 1: Yes
- 2: No

8: RF
9: DK

DSQ_Q23 Do you have any ongoing memory problems or periods of confusion? Please exclude occasional forgetfulness such as not remembering where you put your keys.

1: Yes
2: No
8: RF
9: DK

DSQ_Q24 How often are your daily activities limited by this problem?

1: Never
2: Rarely
3: Sometimes
4: Often
5: Always
8: RF
9: DK

DSQ_Q25 Please remember that your answers will be kept strictly confidential.

Do you have any emotional, psychological or mental health conditions? These may include anxiety, depression, bipolar disorder, substance abuse, anorexia, etc..

1: No
2: Sometimes
3: Often
4: Always
8: RF
9: DK

DSQ_Q26 How often are your daily activities limited by this condition?

1: Never
2: Rarely
3: Sometimes
4: Often
5: Always
8: RF
9: DK

DSQ_R27

The following questions are about pain due to a long-term condition that has lasted or is expected to last for six months or more.

DSQ_Q27 Do you have pain that is always present?

1: Yes
2: No
8: RF
9: DK

DSQ_Q28 Do you [also/nu] have periods of pain that reoccur from time to time?

1: Yes
2: No
8: RF
9: DK

DSQ_Q29 How often does this pain limit your daily activities?

1: Never
2: Rarely
3: Sometimes
4: Often
5: Always
8: RF
9: DK

DSQ_Q30 Do you have any other health problem or long-term condition that has lasted or is expected to last for six months or more?

1: Yes
2: No
8: RF
9: DK

DSQ_Q31 How often does this health problem or long-term condition limit your daily activities?

1: Never
2: Rarely
3: Sometimes
4: Often
5: Always
8: RF
9: DK

Self Rated Stress (SRS)**SRS_Q10** Thinking about the amount of stress in your life, would you say that most days are...?

- 1: Not at all stressful
- 2: Not very stressful
- 3: A bit stressful
- 4: Quite a bit stressful
- 5: Extremely stressful
- 8: RF
- 9: DK

Main Source of Stress (MSS)**MSS_Q130** What is your main source of stress?

- 1: Work
- 2: Financial concerns
- 3: Family
- 4: School work
- 5: Not enough time
- 6: Health
- 7: Other - Specify
- 8: RF
- 9: DK

Main Activity of Respondent - Last Week (MRW)**MRW_R05**The next few questions refer to your main activity.**MRW_Q05**During the past 12 months, was your main activity working at a paid job or business, looking for paid work, going to school, caring for children, household work, retired or something else?

- 01: Working at a paid job or business
- 02: Looking for paid work
- 03: Going to school
- 04: Caring for children
- 05: Household work
- 06: Retired
- 07: Maternity/paternity or parental leave
- 08: Long-term illness
- 09: Volunteering or care-giving other than for children
- 10: Other - Specify

- 98: RF
- 99: DK

MRW_Q10Last week, was your main activity the same as the one of the last 12 months?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

MRW_Q15Last week, what was your main activity?

- 01: Working at a paid job or business
- 02: Vacation (from paid work)
- 03: Looking for paid work
- 04: Going to school
- 05: Caring for children
- 06: Household work
- 07: Retired
- 08: Maternity/paternity or parental leave
- 09: Long-term illness
- 10: Volunteering or care-giving other than for children
- 11: Other - Specify
- 98: RF
- 99: DK

MRW_Q20Were you studying full-time or part-time?

- 1: A full-time student
- 2: A part-time student
- 3: Both full-time and part-time student
- 8: RF
- 9: DK

MRW_Q30In the last four weeks, did you look for a job?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

MRW_Q40Did you have a job or were you self-employed at any time during the past 12 months?

- 1: Yes

- 2: No
- 8: RF
- 9: DK

Respondent ever worked (REW)

REW_Q10 Have you ever worked at a job or business?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

REW_Q20 In what year did you last do any paid work?

Min = 1900; Max = 2016

REW_Q30 How old were you when you last did any paid work?

Min = 10; Max = 95

Work activities - Employment type (WET)

WET_Q110 During the past 12 months, for how many weeks were you employed?

Min = 1; Max = 52

WET_Q120 Were you mainly...?

- 1: A paid worker
- 2: Self-employed
- 3: An unpaid family worker
- 8: RF
- 9: DK

WET_Q171 How many days of paid vacation did you take during the past 12 months?

Min = 0; Max = 365

Respondent Business Information (RBI)

RBI_Q10 How many paid employees did you have working for you?

Min = 0; Max = 200

RBI_Q20 Was your business incorporated?

- 1: Yes

- 2: No
- 8: RF
- 9: DK

Work activities - Telework information (WTI)

WTI_Q110 Excluding overtime, [do/did] you usually work any of your scheduled hours at home?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

WTI_Q120 How many paid hours per week [do/did] you usually work at home?

Min = 1; Max = 168

WTI_Q130 What is the main reason you [do/did] some of your work at home?

- 01: Taking care of children
- 02: Provide care to family or friends for long term health problem
- 03: Other personal or family responsibilities
- 04: Requirements of the job, no choice
- 05: Home is usual place of work
- 06: Better conditions of work
- 07: Saves time, money
- 08: Live too far from work to commute
- 09: Other - Specify
- 98: RF
- 99: DK

Last year employer information (WLY)

WLY_Q110 What is the name of your business?/What was the name of your business?/For whom did you work the longest time during the past 12 months?

Long Answer Length = 80

WLY_Q120 What kind of business, industry or [is/was] this?

Long Answer Length = 80

WLY_Q130 What kind of work [are/were] you doing?

Long Answer Length = 80

- WLY_Q140** What [are/were] your most important activities or duties?
Long Answer Length = 80
- WLY_Q145** Are you still working [for this employer/at this business]?
1: Yes
2: No
8: RF
9: DK
- WLY_Q150** Which of the following best describes your terms of employment in this job? [Are/Were] you a...?
1: Regular employee (no contractual or anticipated termination date)
2: Seasonal employee (employment on this job is intermittent according to the seasons of the year)
3: Term employee (term of employment has a set termination date)
4: Casual or on-call employee
8: RF
9: DK
- WLY_Q160** [Are/Were] you a union member or covered by a union contract or collective agreement in this job?
1: Yes
2: No
8: RF
9: DK
- WLY_Q170** Approximately, how many kilometres [is/was] your place of work from your residence?
Min = 0; Max = 995

Worked Last Week Employer details (WLW)

- WLW_Q110** For whom did you work last week?
Long Answer Length = 80
- WLW_Q120** What kind of business, industry or service was this?
Long Answer Length = 80
- WLW_Q130** What kind of work were you doing?
Long Answer Length = 80

- WLW_Q140** What were your most important activities or duties?
Long Answer Length = 80
- Hours worked (WHW)**
- WHW_Q110** Did you have more than one paid job last week?
1: Yes
2: No
8: RF
9: DK
- WHW_Q120** How many hours a week [do/did] you usually work at your job?
Min = 0.1; Max = 168.0
- WHW_Q130** How many hours a week do you usually work at your main job?
Min = 0.1; Max = 168.0
- WHW_Q140** How many hours a week do you usually work at your other job(s)?
Min = 0.1; Max = 168.0
- WHW_Q160** Why [do/did] you usually work less than 30 hours a week?
11: Own illness or disability
12: Child care responsibilities
13: Care responsibilities for an adult
14: Other personal or family responsibilities
15: Going to school
16: Could only find part-time work
17: Did not want full-time work
18: Requirement of the work
19: Other - Specify
98: RF
99: DK
- WHW_Q210** How many days a week [do/did] you usually work (including all jobs)?
Min = 1; Max = 7
- WHW_Q230** Which of the following best describes your usual work schedule at your [main job/job]? [Is/Was] it...?

- 01: A regular daytime schedule or shift
- 02: A regular evening shift
- 03: A regular night shift
- 04: A rotating shift (one that changes periodically from days to evenings or to nights)
- 05: A split shift (one consisting of two or more distinct periods each day)
- 06: A compressed work week
- 07: On call or casual
- 08: An irregular schedule
- 09: Other - Specify
- 98: RF
- 99: DK

Work Flexible Schedule (WFS)

WFS_Q10 Do you have a flexible schedule that allows you to choose the time you begin or end your work day?/Did you have a flexible schedule that allowed you to choose the time you began or ended your work day?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

Satisfaction of respondent with current balance between job and home life (SRC)

SRC_Q10 How satisfied [are/were] you with the current balance between your job and home life? [Are/Were] you...?

- 1: Very satisfied
- 2: Satisfied
- 3: Neither satisfied nor dissatisfied
- 4: Dissatisfied
- 5: Very dissatisfied
- 8: RF
- 9: DK

SRC_Q20 Why [are/were] you dissatisfied?

- 11: Not enough time for family (include spouse/partner and children)
- 12: Spends too much time on job/main activity
- 13: Not enough time for other activities (exclude work or family related activities)
- 14: Cannot find suitable employment
- 15: Employment related reason(s) (exclude spending too much time on job)
- 16: Health reasons (include sleep disorders)
- 17: Family related reason(s) (exclude not enough time for family)

- 18: Other - Specify
- 98: RF
- 99: DK

Work Life Balance 2 (WLB)

WLB_Q10 In the past 12 months how often has it been difficult to fulfill your family responsibilities because of the amount of time you spent on your job (please include responsibilities concerning your spouse and child(ren) if it applies, as well as your own parents, siblings and other related persons). Was it...?

- 1: All of the time
- 2: Most of the time
- 3: Sometimes
- 4: Never
- 5: Not applicable
- 8: RF
- 9: DK

WLB_Q20 In the past 12 months how often has it been difficult to concentrate or fulfill your work responsibilities because of your family responsibilities (please include responsibilities concerning your spouse and child(ren) if it applies, as well as your own parents, siblings and other related persons). Was it...?

- 1: All of the time
- 2: Most of the time
- 3: Sometimes
- 4: Never
- 5: Not applicable
- 8: RF
- 9: DK

Household Regularly Hires paid help (HRH)

HRH_Q10 For which activities does your household regularly hire paid help (for example: child care, house cleaning, outdoor work)?

- 11: None
- 12: Child care
- 13: House cleaning
- 14: Outdoor work (including snow removal, lawn care)
- 15: Medical help
- 16: Other - Specify
- 98: RF
- 99: DK

Access to transportation (ATT)

ATT_R120 Now some questions related to transportation.

ATT_Q120 How often do you have a vehicle at your disposal?

- 1: All the time
- 2: Some of the time
- 3: Rarely
- 4: Never
- 8: RF
- 9: DK

Commute to work (CTW)

CTW_Q140 Last week, how did you get to [school/work]?

- 11: Car, truck or van - as driver
- 12: Car, truck or van - as passenger
- 13: Public transit (e.g., bus, streetcar, subway, light-rail transit, commuter train, ferry)
- 14: Walked
- 15: Bicycle
- 16: Motorcycle
- 17: Taxicab
- 18: Works or attends school at home
- 19: Other - Specify
- 98: RF
- 99: DK

CTW_Q190 Last week, how often did you experience traffic congestion during your commute to [school/work]?

- 1: Everyday
- 2: Three or four days
- 3: One or two days
- 4: Never
- 8: RF
- 9: DK

Education Minimum Block with concept (EDM)

EDM_Q01 What type of educational institution [are you attending/did you attend]?

- 1: Elementary, junior high school or high school
- 2: Trade school, college, CEGEP or other non-university institution

- 3: University
- 8: RF
- 9: DK

EDM_Q02 [Are you enrolled/Were you enrolled] as...?

- 1: A full-time student
- 2: A part-time student
- 3: Both full-time and part-time student
- 8: RF
- 9: DK

Education - School Attendance v.1 (ESC1)

ESC1_Q01 Are you currently attending school, college, CEGEP or university?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

Educational Attainment (EHG2)

EHG2_Q01 What is the highest grade of elementary or high school you have ever completed?

- 1: Grade 8 or lower (Québec: Secondary II or lower)
- 2: Grade 9 - 10 (Québec: Secondary III or IV, Newfoundland and Labrador: 1st year secondary)
- 3: Grade 11 - 13 (Québec: Secondary V, Newfoundland and Labrador: 2nd to 3rd year of secondary)
- 8: RF
- 9: DK

EHG2_Q02 Did you complete a high school diploma or its equivalent?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

EHG2_Q03 Have you received any other education that could be counted towards a certificate, diploma or degree from an educational institution?

- 1: Yes
- 2: No

- 8: RF
 - 9: DK
- EHG2_Q04** What is the highest certificate, diploma or degree that you have completed?
- 1: Less than high school diploma or its equivalent
 - 2: High school diploma or a high school equivalency certificate
 - 3: Trade certificate or diploma
 - 4: College, CEGEP or other non-university certificate or diploma (other than trades certificates or diplomas)
 - 5: University certificate or diploma below the bachelor's level
 - 6: Bachelor's degree (e.g. B.A., B.Sc., LL.B.)
 - 7: University certificate, diploma, degree above the bachelor's level
 - 8: RF
 - 9: DK

Main activity of respondent's spouse/partner (MAP)

- MAP_R110** The next few questions are about your [spouse/partner]'s main activity.
- MAP_Q110** During the past 12 months, was your [spouse/partner]'s main activity working at a paid job or business, looking for paid work, going to school, caring for children, household work, retired or something else?
- 01: Working at a paid job or business
 - 02: Looking for paid work
 - 03: Going to school
 - 04: Caring for children
 - 05: Household work
 - 06: Retired
 - 07: Maternity/paternity or parental leave
 - 08: Long-term illness
 - 09: Volunteering or care-giving other than for children
 - 10: Other - Specify
 - 98: RF
 - 99: DK
- MAP_Q120** Was [he/she] enrolled as...?

- 1: Full-time student
 - 2: Part-time student
 - 3: Both full-time and part-time student
 - 8: RF
 - 9: DK
- MAP_Q130** Did [he/she] have a job or was [he/she] self-employed at any time during the past 12 months?
- 1: Yes
 - 2: No
 - 8: RF
 - 9: DK

Dwelling of respondent (DOR)

- DOR_R110** The following questions are about your housing and neighbourhood characteristics.
- DOR_Q110** In what type of dwelling are you now living? Is it a...?
- 01: Single detached house
 - 02: Semi-detached or double (side by side)
 - 03: Garden home, town-house or row house
 - 04: Duplex (one above the other)
 - 05: Low-rise apartment (less than 5 stories)
 - 06: High-rise apartment (5 or more stories)
 - 07: Mobile home or trailer
 - 08: Other - Specify
 - 98: RF
 - 99: DK

Length of time respondent has lived in dwelling (LRD)

- LRD_Q10** How long have you lived in this dwelling?
- 1: Less than 6 months
 - 2: 6 months to less than 1 year
 - 3: 1 year to less than 3 years
 - 4: 3 years to less than 5 years
 - 5: 5 years to less than 10 years
 - 6: 10 years and over
 - 8: RF
 - 9: DK

Length of time Respondent has lived in Neighbourhood (LRN)

LRN_Q10 How long have you lived in this neighbourhood?

- 1: Less than 6 months
- 2: 6 months to less than 1 year
- 3: 1 year to less than 3 years
- 4: 3 years to less than 5 years
- 5: 5 years to less than 10 years
- 6: 10 years and over
- 8: RF
- 9: DK

Length of time respondent has lived in city or local community (LRC)**LRC_Q20** How long have you lived in this city or local community?

- 1: Less than 6 months
- 2: 6 months to less than 1 year
- 3: 1 year to less than 3 years
- 4: 3 years to less than 5 years
- 5: 5 years to less than 10 years
- 6: 10 years and over
- 8: RF
- 9: DK

Immigration Extended Block (BPR)**BPR_Q01** In what country were you born?**BPR_Q02** In which province or territory were you born?

- 10: Newfoundland and Labrador
- 11: Prince Edward Island
- 12: Nova Scotia
- 13: New Brunswick
- 24: Quebec
- 35: Ontario
- 46: Manitoba
- 47: Saskatchewan
- 48: Alberta
- 59: British Columbia
- 60: Yukon
- 61: Northwest Territories
- 62: Nunavut

- 98: RF
- 99: DK

BPR_Q03 In what country was your mother born?**BPR_Q04** In which province or territory was your mother born?

- 10: Newfoundland and Labrador
- 11: Prince Edward Island
- 12: Nova Scotia
- 13: New Brunswick
- 24: Quebec
- 35: Ontario
- 46: Manitoba
- 47: Saskatchewan
- 48: Alberta
- 59: British Columbia
- 60: Yukon
- 61: Northwest Territories
- 62: Nunavut
- 98: RF
- 99: DK

BPR_Q09 In what country was your father born?**BPR_Q10** In which province or territory was your father born?

- 10: Newfoundland and Labrador
- 11: Prince Edward Island
- 12: Nova Scotia
- 13: New Brunswick
- 24: Quebec
- 35: Ontario
- 46: Manitoba
- 47: Saskatchewan
- 48: Alberta
- 59: British Columbia
- 60: Yukon
- 61: Northwest Territories
- 62: Nunavut
- 98: RF

99: DK

BPR_Q15 In what year did you first come to Canada to live?

Min = 1871; Max = 2016

BPR_Q16 Are you now, or have you ever been a landed immigrant in Canada?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

BPR_Q17 In what year did you first become a landed immigrant in Canada?

Min = 1871; Max = 2016

BPR_Q18 Of what country are you a citizen?

BPR_Q19 Are you a Canadian citizen by birth or by naturalization?

- 1: By birth
- 2: By naturalization
- 8: RF
- 9: DK

Birthplace of spouse/partner (BPP)

BPP_Q10 In what country was your [spouse/partner] born?

- 1: Search
- 2: Other - Specify
- 8: RF
- 9: DK

BPP_Q20 In which province or territory?

- 10: Newfoundland and Labrador
- 11: Prince Edward Island
- 12: Nova Scotia
- 13: New Brunswick
- 24: Quebec
- 35: Ontario
- 46: Manitoba
- 47: Saskatchewan
- 48: Alberta

- 59: British Columbia
- 60: Yukon
- 61: Northwest Territories
- 62: Nunavut
- 98: RF
- 99: DK

Aboriginal Minimum (AMB)

AMB_Q01 Are you an Aboriginal person, that is, First Nations, Métis or Inuk (Inuit)? First Nations includes Status and Non-Status Indians.

- 1: Yes
- 2: No
- 8: RF
- 9: DK

AMB_Q02 Are you First Nations, Métis or Inuk (Inuit)?

- 1: First Nations (North American Indian)
- 2: Métis
- 3: Inuk (Inuit)
- 8: RF
- 9: DK

Aboriginal Identity of Spouse/Partner (AIP)

AIP_Q01 Is your [spouse/partner] an Aboriginal person (that is, First Nations, Métis or Inuk [Inuit])?

- 1: Yes
- 2: No
- 8: RF
- 9: DK

AIP_Q02 Is your [spouse/partner] First Nations, Métis or Inuk (Inuit)?

- 11: First Nations (North American Indian)
- 12: Métis
- 13: Inuk (Inuit)
- 98: RF
- 99: DK

Population group (PG)

PG_Q01

You may belong to one or more racial or cultural groups on the following list.

Are you...?

- 01: White
- 02: South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- 03: Chinese
- 04: Black
- 05: Filipino
- 06: Latin American
- 07: Arab
- 08: Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian)
- 09: West Asian (e.g., Iranian, Afghan)
- 10: Korean
- 11: Japanese
- 12: Other - Specify
- 98: RF
- 99: DK

Visible minority status of respondent's partner (VMP)

- VMP_Q110** Is your [spouse/partner]...?
- 01: White
 - 02: South Asian (e.g., East Indian, Pakistani, Sri Lankan)
 - 03: Chinese
 - 04: Black
 - 05: Filipino
 - 06: Latin American
 - 07: Arab
 - 08: Southeast Asian (e.g., Vietnamese, Cambodian, Malaysian, Laotian)
 - 09: West Asian (e.g., Iranian, Afghan)
 - 10: Korean
 - 11: Japanese
 - 12: Other - Specify
 - 98: RF
 - 99: DK

Religion extended (REE)

REE_Q01 What is your religion?

Specify one denomination or religion only, even if you are not currently a practicing member of that group.

- 1: Search
- 2: Other - Specify
- 8: RF
- 9: DK

REE_Q02 Not counting events such as weddings or funerals, during the past 12 months, how often did you participate in religious activities or attend religious services or meetings?

- 1: At least once a week
- 2: At least once a month
- 3: At least 3 times a year
- 4: Once or twice a year
- 5: Not at all
- 8: RF
- 9: DK

REE_Q03 In the past 12 months, how often did you engage in religious or spiritual activities on your own, including prayer, meditation and other forms of worship taking place at home or in any other location?

- 1: At least once a day
- 2: At least once a week
- 3: At least once a month
- 4: At least 3 times a year
- 5: Once or twice a year
- 6: Not at all
- 8: RF
- 9: DK

Importance of Religion (RLR)

- RLR_Q110** How important are your religious or spiritual beliefs to the way you live your life? Would you say they are...?
- 1: Very important
 - 2: Somewhat important
 - 3: Not very important
 - 4: Not at all important
 - 8: RF
 - 9: DK

Language Minimum (LAN)

LAN_Q01 Of English or French, which language(s) do you speak well enough to conduct a conversation? Is it...?

- 1: English only
- 2: French only
- 3: Both English and French
- 4: Neither English nor French
- 8: RF
- 9: DK

LAN_Q02 What language do you speak most often at home?

LAN_Q03 What is the language that you first learned at home in childhood and still understand?

Sexual Orientation of Respondent (SOR)

SOR_R110 The following question asks about sexual orientation.

SOR_Q110 Do you consider yourself to be...?

- 1: Heterosexual (sexual relations with people of the opposite sex)
- 2: Homosexual, that is lesbian or gay (sexual relations with people of your own sex)
- 3: Bisexual (sexual relations with people of both sexes)
- 8: RF
- 9: DK

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