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December 2024

Christmas Time in Poland Through the Lens of Gender Equality

In the Christmas season we examine how people in Poland allocate their precious minutes in the days before and during the holidays. We use data from the Polish Time Use Survey and show that, in several aspects of time use, Christmas is indeed special, and that there are notable differences in how men and women allocate their time to work and pleasure. Women spend more time than men on household chores and preparing meals, and in the latter case the imbalance is particularly striking: on average women spend two hours more per day cooking ahead of the holidays.



Introduction

Every year, billions of people around the world spend the end of December enjoying time with friends and family. Many celebrate Christmas on the 25th and 26th, while others bid farewell to 2024 and welcome a new year. Celebrations and fun are often preceded or combined with intensive preparations—cooking, cleaning, shopping, and travel. Time is of the essence, and as with other major celebrations, the 2024 Christmas season is likely to feel too short, intensive, and possibly stressful.

In this policy brief we look at how people in Poland allocate their precious minutes during these special days. Every ten years the Polish Central Statistical Office collects detailed data on time use, interviewing over 35 000 individuals, most of whom fill in diaries of their time allocation over two different days. This results in over 70 000 diaries with information divided into 144 ten-minute intervals. We use the latest available survey wave from 2013 in which we have information from 72 967 correctly completed diaries, on average almost two hundred diaries per day (the 2023 data is not yet available for research purposes). Particularly interesting is that the data collection in 2013 was carried out in the days running up to Christmas and continued through the 2013 holiday season. This gives us a unique chance to examine the allocation of time over this period, and specifically compare how men and women spend their time in preparation for celebrations, and during the holidays. We compare Christmas time allocation to diaries filled in on weekdays and Sundays in November to show, on the one hand, that the way people in Poland spend their holidays differ in several ways from a regular Sunday, and that allocation of time is particularly unique in the days running up to Christmas. This relates both to how much time is spent on getting ready – preparing meals, cleaning the house, etc., as well as to how these chores are allocated between men and women.

Time Use Diaries in Poland

Polish time use data is unique in its scope and content. During the year of data collection over 35 000 participants complete detailed time use diaries on two days – one weekday and one weekend day. Every ten-minute slot is assigned a category for the ‘main activity,’ with the option to record a ‘secondary activity’ for multitasking. The 163 detailed categories range from broad types like “sleeping” or “time devoted to main job” to specific activities such as “repairing household equipment” or “handcrafts”. The large number of diaries and narrow activity focus enables unique analyses of time use and allows studying specific days (for an example, see Adena et al., 2023).

In 2013 the diaries cover 355 days and on these ‘active’ days the number of completed diaries varied from 116 (on 6th November) to 562 (6th January). The diaries were completed also on the 24th and 23rd of December respectively, (239 diaries) and on both days of Christmas (25th and 26th of December, 250 diaries). These special four days – which happened to start on a Monday – are compared to four November weekdays, the consequent days starting on Monday the 25th of November (549 diaries), and two November Sundays (17th and 24th of November, 737 diaries).

Is Christmas Time Different?

The 163 different categories of time use are aggregated into 10 groups: (1) preparing meals, (2) household work and cleaning, (3) meals, meetings and celebrations, (4) church and prayer, (5) watching TV, using computer, (6) walks, games and hobbies, (7) shopping, (8) work and study, (9) personal care, (10) sleeping.

These broad categories include activities which are similar and/or related to the broad headings. For example, ‘household work and cleaning’ includes vehicle maintenance or cleaning the basement, while ‘meals, meetings and celebrations’ include also ‘phone calls with family and friends’ or ‘reading, playing and talking with children’. The



broad activity categories were identified by examining the most common activities given the time allocated by respondents to the listed activities in November and December. Other less common activities were then added to those main

categories. The average number of minutes allocated to the ten categories in the weekdays and Sundays of November, the two days before Christmas, and the Christmas holidays is presented in Table 1.

Table 1. Time Allocation: average number of minutes per day allocated to ten aggregate activity categories

Activity categories:	November: weekdays	November: Sundays	December: 23rd-24th	December: 25th-26th
Preparing meals	70.86	79.74	168.76	55.26
Household work and cleaning	90.89	55.68	124.76	39.32
Meals, meetings and celebrations	170.82	247.00	186.70	263.44
Church and prayer	2.67	33.27	19.85	31.99
Watching TV, using computer	150.53	207.31	125.70	192.37
Walks, games, hobbies	80.40	101.73	89.18	170.63
Shopping	28.69	10.31	30.28	0.10
Work and study	286.79	67.69	143.35	62.30
Personal care	59.10	60.34	73.86	65.41
Sleeping	498.79	576.52	477.29	559.18
Number of observations:	737	549	239	250

Notes: 'November weekdays': 25th-28th November 2013; November Sundays: 17th and 24th of November 2013. Numbers represent unconditional averages.

Source: Own calculations using the Polish Time Use Survey 2013.

As evident there are interesting differences in the pattern of time allocation between the four groups of days which seem to be a result of discernible differences in behaviour. On 'usual weekdays' in late November respondents spend on average about 70 minutes on meal preparations and almost 90 minutes on housework. This increases significantly on the 23rd and 24th of December, respectively, to nearly three hours (169 minutes) and over two hours (125 minutes). As expected this then drops substantially over the two days of Christmas. In terms of housework and cooking, Christmas days differ slightly from a typical Sunday. However, even on these days, cooking and household tasks do not come to a complete halt: there is still work to be done! It is clear, though, that the brunt of the preparation is conducted in the days leading up to Christmas. It should be noted also that in Polish tradition the main Christmas celebration usually takes place in

the evening of the 24th, although preparations often run all the way up to that evening meal. We can observe for example that the average working time on 23rd-24th December is much lower compared to late November and the time spent on attending mass or prayer is already significantly higher. The preparations on those two days seem to 'eat in' to the amount of sleep and time spent in front of the TV. We see more time devoted to meals and celebrations compared to normal weekdays in November, although the values listed are averages over the two days including the 23rd.

The average allocation of time on the two days of Christmas stands out in a few categories. In particular more time is allocated to pleasure: 'walks, games and hobbies' take up 171 minutes per day on average over the Christmas holidays, which is over an hour more compared to a normal Sunday. Watching TV is another favourite



Christmas pass-time (191 minutes), although people seem to watch slightly less TV on Christmas compared to November Sundays. While meals and celebrations take up more than four hours per day on average, this is only slightly longer than on a normal Sunday (263 vs 247 minutes), and Christmas sleeping patterns are also very similar compared to Sundays – with little catching up on sleep lost in the lead-up to the holidays.

Work and Pleasure over Christmas – Gender Differences in Time Allocation

In Figure 1 we present the average allocation of time in Poland in the run up to Christmas and over the two holidays separately for men and women. The figure depicts the ten aggregated categories, and for each set of days the outer ring represents the average time allocation among women, while the inner ring shows the average time allocation among men. We see some striking differences. Women spend almost 3.5 hours on average on cooking on each of the two days before Christmas, which is nearly 1.5 hours more compared to men. The difference in household work is not as

striking, and men tend to spend more time on pre-Christmas shopping (35 vs 26 minutes per day on average). Men also spend more time at work during these two days (189 vs 110 minutes), although much of the time which is not spent on cooking seems to go to leisure: on average men watch more TV and spend more time eating and socializing.

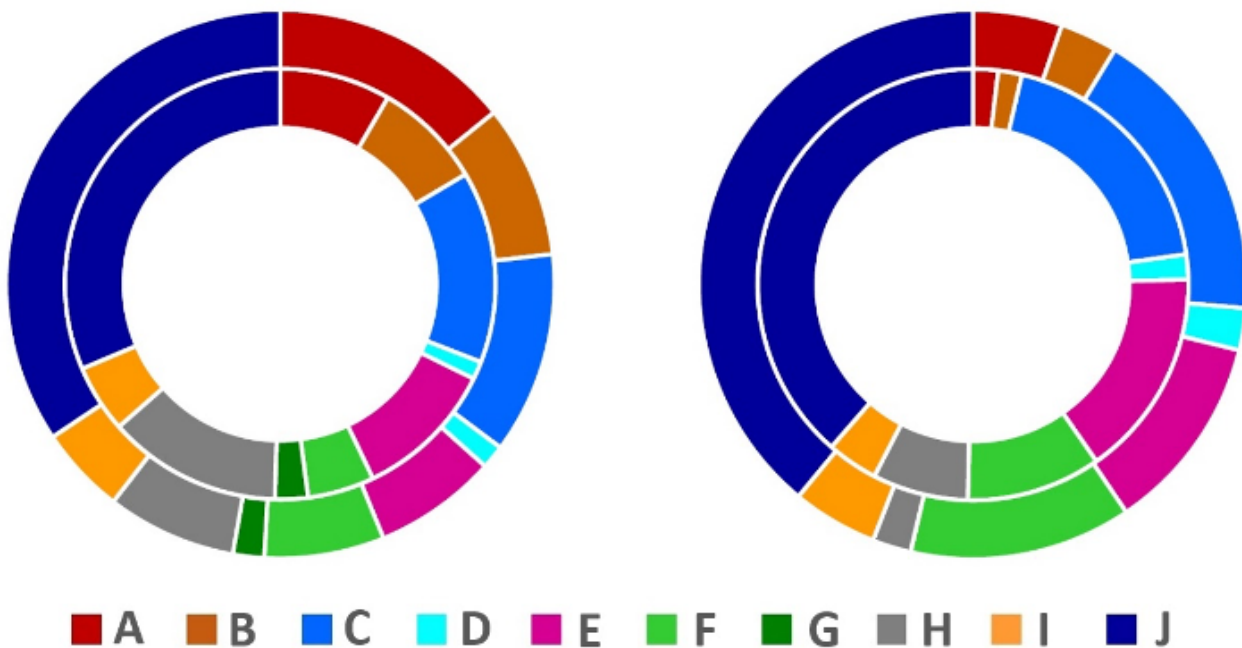
Work and leisure are also unequally divided between men and women on the two days of Christmas. Women spend more than 2 hours per day on average on cooking and cleaning, while men spend only about 50 minutes per day. Over Christmas men spend more time in front of the TV, but they also devote more time to paid work, with an average of about 100 minutes per day. Celebrations and meals over the Christmas season naturally take up much of the time, and in this case the disproportions are not as large, though both in the run up and during Christmas men tend to spend slightly more time ‘at the table’ than women. The difference is more pronounced for the days running up to Christmas (23-24th December) which is noteworthy, given that the evening on the 24th is traditionally the main family celebration time in Poland.



Figure 1. Christmas time allocation among women (outer rings) and men (inner rings)

a) Daily averages: December 23rd-24th

b) Daily averages: December 25th-26th



Notes: A: preparing meals; B: household work and cleaning; C: meals, meetings and celebrations; D: church and prayer; E: watching TV, using computer; F: walks, games and hobbies; G: shopping; H: work and study; I: personal care; J: sleeping. The rings represent a full 24-hour day with all reported activities collected into ten aggregate activity categories. The values are averages for the samples interviewed on 23rd and 24th of December 2013 (Figure 1a) and on the two days of Christmas (25th and 26th of December 2013). Source: Own calculations based on the Polish Time Use Survey 2013.

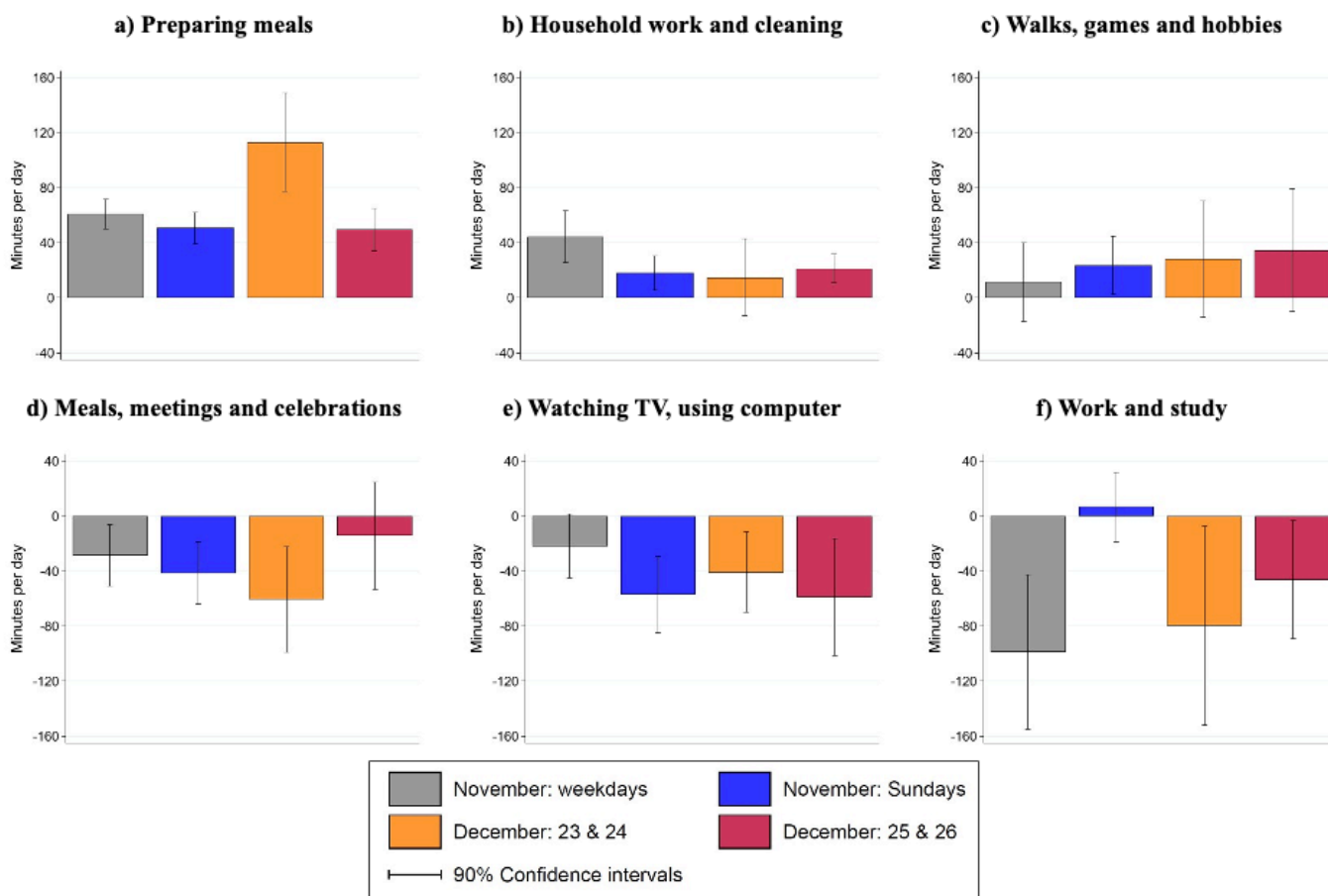
Is Christmas Time Special? The Gender Perspective

In this section we examine the data in a more formal way by adjusting the patterns of time use of men and women for differences in age, education and household size. We focus on six out of the ten categories distinguished above and regress time (in minutes) within these categories

separately for the four sets of days detailed in Table 1: weekdays in November (25th-28th), Sundays in November (17th and 24th), as well as for 23rd-24th December and 25-26th December. The estimates of the coefficient on the female indicator included in these regressions reflect how much more or how much less time women spend on a specific activity category compared to men, conditional on the controls.



Figure 2. Women vs men: differences in time allocation in November and over Christmas



Notes: The bars represent coefficients on the female dummy estimated in linear regressions of time spent on a specific activity in a specific set of days. Control variables include age, education and household size. The specific days are: ‘November: weekdays’: 25th-28th November 2013; ‘November: Sundays’: 17th and 24th of November 2013.

Source: Own calculations using the Polish Time Use Survey 2013.

In Figure 2 we present the results for the six time-use categories, in each case showing the estimated coefficient on the female indicator for the four sets of days. Since the samples are quite small (see Table 1), the standard errors of the estimates are relatively large. However, they still allow us to infer interesting patterns of time use differences between men and women. The most visible difference concerns the time allocated to preparing meals in the run up to Christmas. While women spend more time preparing meals in all four-day categories, the days just before Christmas are clearly special (Figure 2a). On average on the 23rd-24th of December, women spend almost two hours longer on this activity per day compared to men, while on a ‘normal’ Sunday or weekdays this

difference is ‘only’ 51 and 61 minutes, respectively. Interestingly, women continue spending more time than men on meals preparation also over the holidays, although the extra minutes in this case resemble a usual Sunday. The latter similarity seems to be repeated in the estimates related to ‘household work and cleaning’ (Figure 2b) – women once again spend more time doing chores: 18 minutes more than men on a normal Sunday and 21 minutes more over Christmas. In this category we do not see any statistically significant imbalances during the days leading up to Christmas (the point estimate however suggests that also on those days women ‘out-perform’ men by about 15 minutes per day). On the other hand, while (except for November Sundays) the



differences are not statistically significant, women seem to spend more time on 'walks, games and hobbies' compared to men and the difference is highest over the Christmas holidays (35 minutes per day, see Figure 2c). Since the day is 24 hours long for everyone, we should see some differences going the other direction – activities where women spend less time compared to men. Once again we see some striking patterns in the days running up to Christmas with women spending much less time compared to men on 'meals, meetings and celebrations' (60 minutes, see Figure 2d) as well as on 'work and study' (80 minutes, see Figure 2f).

With all the work that seems to be going into preparing meals and other housework, it is perhaps good to see that at least on the 25th and 26th of December women spend as much time as men on Christmas celebrations (Figure 2d). It should be noted though that men get some additional 'passive' rest in front of the TV on those days (Figure 2e). Differences in TV watching patterns over Christmas are similar to those observed on 'normal' Sundays and the days just before the holidays – men watch TV by an average of 57 and 41 minutes/day more than women. Differences between men and women in the time spent on 'work and study' just before Christmas are not very different compared to 'normal' weekdays when men on average work nearly 100 minutes per day more compared to women. For this category Christmas days seem different from a 'normal' Sunday: women tend to work less during the holidays compared to men (by about 46 minutes/day), but we see virtually no difference in labor market activities on a normal Sunday.

Conclusion

If patterns of time-use have not changed much over the past ten years, Poles will spend almost four and a half hours per day on average enjoying

meals and celebrations during the coming Christmas. They will add to this, on average, slightly more than three hours in front of the TV and about the same time enjoying walks, games and hobbies. The holiday will be preceded by intense preparations – in particular regarding preparing meals (170 minutes per day on the 23rd and 24th of December) and household work and cleaning (125 minutes per day). As we show in this brief, in 2013, the time burden of holiday preparations and household chores related to Christmas, was certainly not shared equally between men and women. Women spent much more time on those activities, especially in the days running up to Christmas, but also on the 25th and 26th of December.

With the upcoming release of the 2023 Polish time use data we will be able to examine whether patterns of Christmas time use have changed over the last decade. However, how our precious time over this year's holiday season will be allocated is entirely up to us.

Merry Christmas!

Acknowledgement

Data used for the analysis in this brief come from the 2013 Polish Time Use Survey provided by the Polish Central Statistical Office (GUS). GUS bears no responsibility for the presented results and interpretation. I am very grateful to Daniel Hamermesh for suggestions and comments.

References

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