Reviewer 1

The present study used the raw data from the '2019 time of life survey' of the National Statistical Office to investigate the time use and satisfaction of single-parent families according to gender. The results showed that the subjects spent the most time on Rest and sleep, followed by Instrumental activities of daily living (IADLs), Work, and Health management. While the male subjects spent more time on Work than the female subjects, and the female subjects spent more time on IADLs, Education and Social participation. The study is overall well conducted.

Point 1

1. A flowchart to demonstrate the study procedure will help the readers to better understand the study.

Response: Thank you for your comments. Therefore, we've added a flowchart to demonstrate the study procedure.
Point 2

2. The statistical methods should be more detailed.

Response: Thank you for your comments. Therefore, we revised as follow:

Statistical analysis

The data collected in this study were analyzed using SPSS 25.0 Version. The general characteristics and time usage of the study subjects were presented using frequency analysis and descriptive statistics, respectively. Independent t-test was used to compare time usage by occupational area, time deficiency and life satisfaction between genders. In addition, multiple linear regression analysis was used to determine whether time usage by occupational area affects time deficiency. The stepwise analysis method was used with p < 0.05 as the cut-off for statistical significance.
Reviewer 2

This manuscript uses time-use data to study the time-use issues and their impact on satisfaction in single-parent families. I believe time-use is a meaningful topic. The author's research is valuable in terms of the design of the research methods and the results presented. However, there are some issues that need to be addressed before publication.

Point 1

Firstly, the study lacks research hypotheses, and 2-3 research hypotheses should be proposed.

Response: Thank you for your comments. Therefore, we added a research hypothesis.

In addition, no research has been conducted on the use of time for single-parent families by classifying occupational areas in accordance with the fourth edition of the newly published Occupational Therapy Practice Framework in 2020. Single-parent families are expected to differ in their time use by occupational area based on gender, as well as differences in time deficiency and life satisfaction.

Therefore, the time usage data of the National Statistical Office from the ‘2019 time of life survey’ is classified in this study based on the fourth edition of the Occupational Therapy Practice Framework, as well as the time use and satisfaction of single-parent families according to gender.

Point 2

Secondly, it would be better to present Table 3 using graphics such as bar charts or pie charts.

Response: Thank you for your comments. Therefore, we've added a pie chart.
Point 3

Thirdly, the current study lacks depth, only using basic descriptive statistical analysis, and could benefit from the addition of regression analysis or structural equation models.

Response: Thank you for your comments. Therefore, we used multiple linear regression analysis was used to determine whether time usage by occupational area affects time deficiency. We have revised the Abstract, Results, and Discussion as follows:

Abstract

BACKGROUND

Single-parent families are burdened with dual roles as parents amidst economic poverty due to the lack of a spouse. Single parents also face the complications of time poverty.
AIM

Examine the time use of single-parent families by dividing their time into occupational area and explore the differences in time deficiency and life satisfaction.

METHODS

In this study, the time usage in the ‘2019 time of life survey’ data of the National Statistical Office is classified based on the fourth edition of the Occupational Therapy Practice Framework, and the time use and satisfaction of single-parent families classified according to gender. In the ‘2019 time of life survey’ of the National Statistical Office, the subjects who selected single-parent families in the ‘single parent-parent-grandchild households’ item were first selected. The data of 404 parents from single-parent families were selected next. The time usage, time deficiency, and life satisfaction were analyzed by occupational area.

RESULTS

The subjects spent the most time resting and sleeping, followed by engaging in instrumental activities of daily living (IADLs), work, and health management. As a result of comparing the subjects by gender, it was found that the male subjects spent more time on work than the female subjects, and the female subjects spent more time on IADLs, education and social participation. As a result of comparing time deficiency and life satisfaction, the male subjects felt that they lacked time compared to the female subjects. There was no significant difference in life satisfaction. By examining whether single-parent families' time use by occupational area affected the time deficiency, it was found that male's working time make them feel they have less time, while female's leisure time makes them feel they have more time.

CONCLUSION

This study made it possible to determine the characteristics of single-parent households’ time use and gender differences. Furthermore, it is expected to be used as basic data for measures to solve not only time poverty, but also economic poverty in single-parent families.

Effects of time usage by occupational area on time deficiency

Multiple linear regression analyses were conducted to determine whether time use by occupational area influenced their perception of time deficiency. The stepwise analysis method was used (Table 6).
For the males, results of the analysis showed that the regression model was appropriate with F=6.461 (p<.05), and work had a significant positive effect on the feeling of time deficiency with B=0.001 (p<.05). Therefore, an increase in male’s time use for Work by 1 minute increases the time deficiency by 0.001 (Table 6).

For females, F=4.946 (p<.05) can be said to be suitable for this regression model, and leisure is B=-0.001 (p<.05), which had a significant negative effect on the time deficiency. Therefore, it was found that an increase in time usage for leisure by 1 minute decreased the time deficiency by 0.001 (Table 6).

### Table 6 Effects of time usage by occupational area on time deficiency

<table>
<thead>
<tr>
<th></th>
<th>Male (n=134)</th>
<th>Female (n=270)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Work</td>
<td>0.001*</td>
<td>Leisure</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.598</td>
<td>(Constant)</td>
</tr>
<tr>
<td>F</td>
<td>6.461*</td>
<td>F</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.039</td>
<td>Adjusted R²</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.014</td>
</tr>
</tbody>
</table>

B: Unstandardized Coefficients, *p<0.05

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(Discussion)

Comparison of time deficiency and life satisfaction according to the gender of single-parent families showed no significant difference in life satisfaction. However, there was a significant difference between genders regarding time deficiency, and the male subjects felt that they lacked time compared to the female subjects (p<0.05). In this study, both men and women received scores corresponding to the 4-point Likert scale, 'Sometimes feeling insufficient' (2 points), indicating that both single-parent families feel insufficient time use. In the case of single-parent families, they are simultaneously playing the roles of domestic and paid workers, thus feeling the lack of time use. In addition, it is believed that the results of this study showed slightly lower results because the male subjects spent more time in the work area than the female subjects. Previous studies have shown that when single-parent families work, the female subjects feel that they have less time than the male subjects.[20]. This study’s classification of the occupational area based on the Occupational Therapy Practice Framework-4 is thought to have yielded different results from the previous one.

By examining whether single-parent families' time use by occupational area affected the time deficiency, significant differences between genders were observed, with the male's working time making them feel they have less time, while the female's leisure time makes them feel they have more time. In the case of men, they felt that as working time increased, time deficiency increased, and for women, the lack of time decreased as the time spent on leisure increased. These results are consistent with the results of previous studies that show that working hours are a factor that consistently makes...
people feel short of time regardless of weekdays and weekends\textsuperscript{[28]}. Based on this, it is thought that economic support is needed to reduce working hours to resolve men's time deficiency. In addition, various ways to spend leisure time should be sought to reduce women's time deficiency.
To reviewer:

We really appreciate the great comments as they help us improve the quality of our articles.