Development of a Value Recognition Method for Working Mothers to Balance Work and Childcare based on Their Sense of Authenticity

Hanako Tajima *, Takashi Matsuura †,

Tsubasa Ito†, Seiko Shirasaka †

Abstract

This study proposes and evaluates a psychological coping method that increases the sense of authenticity of working mothers. The number of working mothers is increasing as women's participation in the workforce has increased considerably. However, working mothers experience conflicts between balancing work and childcare. They can continue working because they can engage in in psychological self-care and overcome the dilemma of balancing work and childcare through physical resources and support. Therefore, it is important for working mothers to integrate their identities as workers and mothers. Our proposed method helps working mothers feel that they can achieve both career development and childcare that relates to their authentic selves and assuages conflicts arising from creating a balance between them. In the proposed method, working mothers reflect on their past and identify the value of work and childcare. The goal is to determine common values for mothers and help them recognize that both work and childcare can coexist, fulfilling their own personalities. We conducted a control experiment with 23 working mothers, in which the proposed method and an existing method were implemented. The effectiveness and validity were compared and evaluated by analyzing questionnaires before and after the experiment. The findings revealed that the proposed method was highly effective regarding the sense of authenticity and work–family enrichment. In addition, working mothers experienced that they could balance career and childcare, which related to their authentic selves, and were more likely to use the proposed method than the existing method. Our proposed method is a psychological coping method that enables working mothers to recognize the common value of work and childcare, realize their identity, and raise their sense of authenticity.

Keywords: balancing work and childcare, sense of authenticity, value recognition, work–family enrichment, working mother

1 Introduction

In Japan, women are actively participating in the labor force owing to a decline in birthrate and aging working population, necessitating an environment that promotes women's success. Consequently, employment among women in their late 20s to 40s has increased [1], increasing the employment rate of women with children. Approximately 40% of working women continued to work after their first childbirth in the past. This percentage increased

---

* The System Design and Management Research Institute of Graduate School of System Design and Management, Keio University
† Graduate School of System Design and Management, Keio University, Japan

significantly to 69.5% during 2015–2019 [2], indicating that the proportion of women who balance work and childcare is increasing. However, working mothers experience conflict between balancing work and childcare. When their children are preschoolers, sudden fevers among children cause their absence from work. Even when their children start elementary school, they lack of communication with their children due to fewer teacher updates and interactions with children after work and have limited childcare hours. Moreover, mothers are expected to assume responsibility for their children's education. Regardless of the child's age, conflicts exist between work and childcare, and many mothers quit their jobs because they feel anxious about balancing work and childcare.

How do mothers cope with these daily conflicts? Working mothers overcome the dilemma of balancing work and childcare and continue to work owing to their ability to pursue a purpose that is valuable to them and engage in in psychological self-care in that situation, even in a state of conflict [3]. We consider how working mothers cope with their worries and conflicts in balancing work and childcare from the psychological perspective rather than through physical support and other environmental arrangements. In particular, we develop methods that enable mothers to believe that they can balance their careers and childcare that relate to their authentic selves, considering the integration of their identities as workers and mothers. Therefore, we aim to ease daily conflicts between work and childcare faced by working women with children. Previous research discusses the need for psychological measures for working mothers; however, no practical study has focused on such measures [3]. This study develops a psychological practice method that helps working mothers integrate their identities as workers and mothers to improve their sense of authenticity.

The remaining paper is organized as follows: Section 2 summarizes previous studies. Sections 3 and 4 describe the proposed method and evaluation method, respectively. Section 5 presents the evaluation results, and Section 6 presents the discussion. Finally, Section 7 concludes the study and provides future research directions.

2   Literature Review

Work–family conflict (WFC) is "a form of role conflict that occurs when work and family roles conflict with each other" [4]; it was first observed in Europe and the United States, where the diversification of the family began earlier than in Japan, including women's entry into society and the increase in single mothers. WFC is "a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect" [5]. Although WFC focuses on the negative aspects of balancing work and childcare, some studies focus on its positive aspects. Work–family enrichment (WFE) is defined as "the extent to which experiences in one role improve the quality of life in the other role" [6]. Among the resources that effectuate WFE, psychological and physical resources include positive self-evaluations such as self-efficacy and self-esteem [6]. Self-efficacy contributes to work and family satisfaction [7]. Rashid et al. [8] analyze the relationship between self-esteem, WFC, and satisfaction and find a negative relationship between self-esteem and WFC.

Deci et al. [9] distinguish between contingent self-esteem, in which the sense of self-worth depends on external criteria, and true self-esteem, in which the sense of self-worth is independent of social success or failure and comes naturally from being oneself. The most important aspect of true self-esteem is authenticity [10]. Authenticity refers to "the way a person

is, the way he or she really lives," whereas the subjective sense of "feeling that a person is who he or she is" is called the sense of authenticity [11].

Women in the child-rearing phase hope to fulfill both roles as the "self as a mother" required by their own children and "myself other than as a mother" required by the society and workplace [12]. Working mothers who can proactively address the conflict between self as an individual and self as a mother and successfully integrate them report lower child-rearing difficulties [13]. Thus, the fulfillment of both motherhood and individual selves is important for mothers to achieve a balance between the two roles. Garey [14], based on the fact that working women value their relationship with work and simultaneously protect their identity as good mothers and integrate their identities as workers and mothers, proposes a framework that integrates their identities as workers and mothers and "weaves together" work and childcare rather than the previous framework that categorizes and examines them as either "work-oriented" or "family-oriented."

3   Proposed Method

The proposed method involves reflecting on the past, identifying the value of work and childcare, and recognizing the common values of work and childcare. Figure 1 illustrates the process of the proposed method.

The proposed method comprises four major stages. In the first stage, working mothers reflect on their past and themselves. In this stage, there are three steps: STEP 1 involves creating their timeline, and STEP 2 includes creating a transition of the degree of the mother's role to visualize the change in role. STEP 3 involves documenting the changes in the mothers' thought processes associated with their role changes. In the second stage, they identify value in both work and childcare. This stage has two steps: STEPS 4 and 5 include identifying the values of work and childcare, respectively. In the third stage (STEP 6), to recognize common values of work and childcare, the values of work and childcare identified in STEPS 4 and 5 are grouped. In the final stage (STEP 7), they create slogans to balance work and childcare.
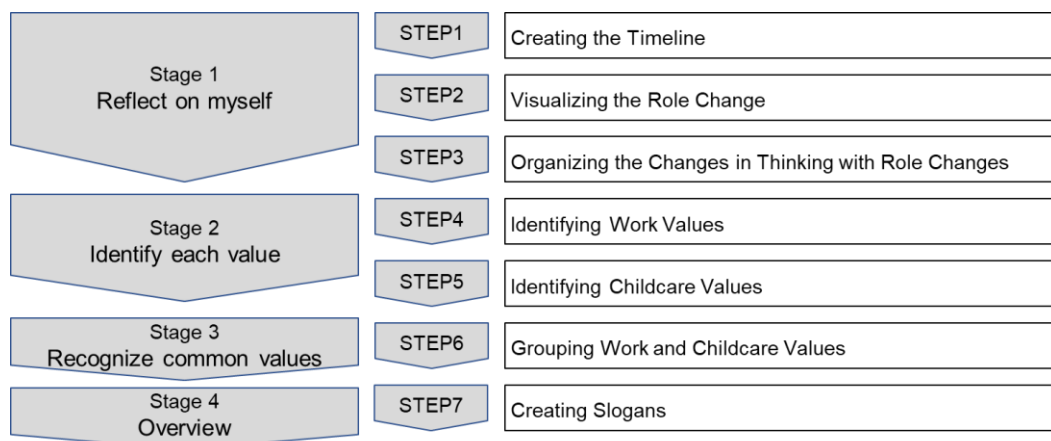

Figure 1: Overall process of the proposed method

In STEP 1 (Figure 2), in addition to the mothers involved, past events and activities regarding their children, husbands, and other family members should be described, along with what they were thinking at the time. Regarding integrating their identities as individuals and

mothers, mothers are greatly influenced by their relationships with their families during child-rearing, especially with their husbands [15]. Hence, it was necessary to describe the state of the family at the time in a timeline for mothers to reflect on themselves. The mothers filled in the three categories of "work," "family," and "leisure/hobby/study." We added the category "leisure/hobbies/study" because mothers might be working on things other than work and family for self-actualization.

Figure 2: Timeline

In STEP 2, mothers provide the percentage of time they devoted to the roles of "work," "wife," "mother," "child," and "leisure/hobby/study" for each group so that the sum totals 100%. Based on the input information, a 100% vertical product bar graph is created (Figure 3). Previous studies suggest that mothers change their way of thinking and values in response to changes in their environment and roles and seek their own way of life [16]. We incorporated this graph into the proposed method to help mothers notice changes in their way of thinking and values by grasping the changes in their roles. The "family" was subdivided into "wife," "mother," and "child," and it was described in terms of their actions as a wife, mother, or child (e.g. the action of caring for their own parents as the child).

Figure 3: Role change graph

In STEP 3, based on the results of the STEP 1 timeline and STEP 2 change graph, the mothers described their feelings, for each point at which the role ratio changed. They also wrote any thought they had at the time. It was expected that by visually grasping changes in their roles through the role change graph, working mothers would recognize the relationship and inevitability of changes in their own thoughts and activities, and they would come to accept them

rather than being dissatisfied with their current activities. In this STEP 3, the aim was to help mothers sort out their own feelings.

In STEP 4, the mothers observed the timeline created in STEP 1 and documented "what they enjoyed," "why they worked hard," and "why they felt glad" about their jobs (Figure 4). Additionally, they described the reasons for feeling that way. Based on the reasons described, each element of the description was filled into one sticky note.

In STEP 5, the mothers described "what I find joyful, what you find enjoyable, what you hold value, and what you consider to be my responsibility in childcare (Figure5). Thus, the domain of childcare is divided and described as "care," "discipline/education," "learning together/socialization," and "other." The elements of the description were written individually on a sheet of sticky notes in the same manner as the work values were found. In addition, they described "what you are doing in your daily life to balance your work and childcare." From the details of their effort, we focused on "what you feel is particularly important" and described the elements on sticky notes. To balance work and childcare, working mothers are often compelled to make sudden decisions, particularly regarding childcare, within a limited timeframe. Therefore, we designed a method in which they documented their efforts, as we believe that the value of childcare is hidden in these devices.
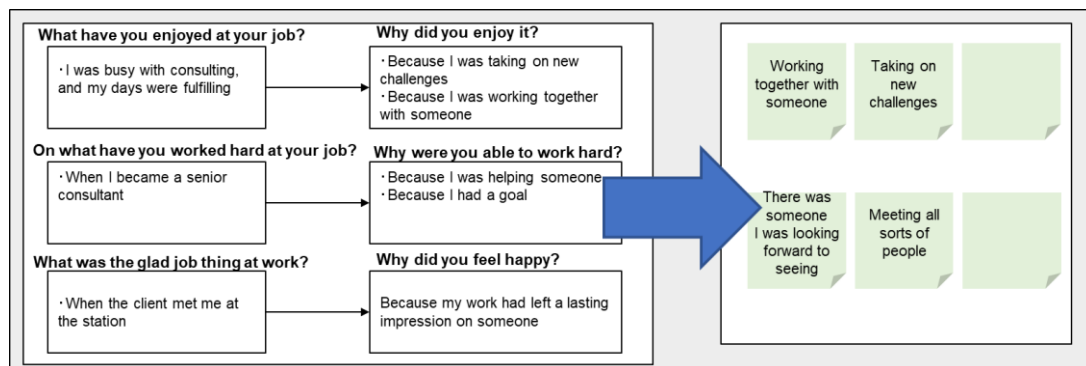

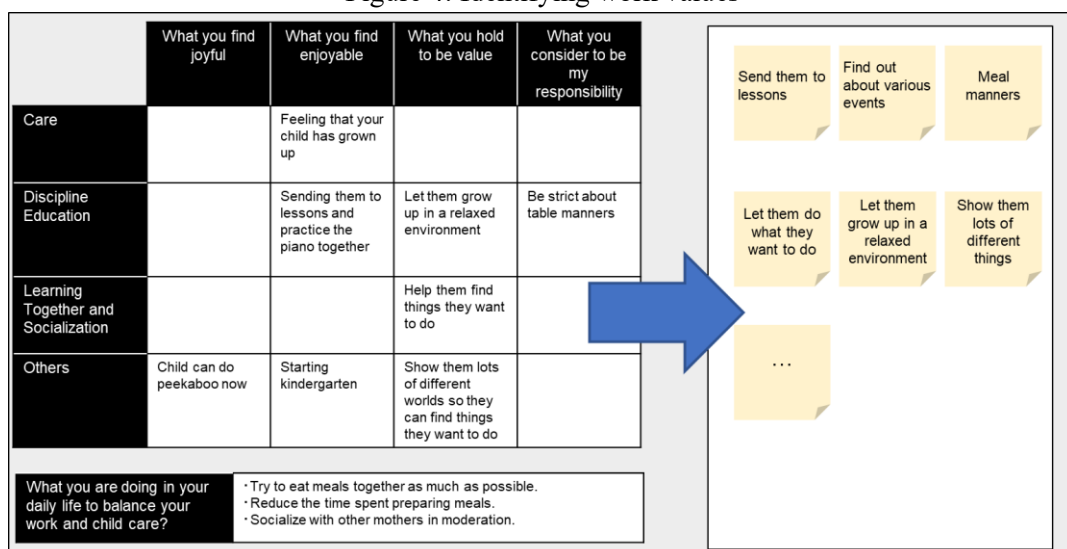Figure 4: Identifying work values

Figure 5: Identifying childcare values

In STEP 6, the mothers grouped the work and childcare values identified in STEPS 4 and 5 by collecting similar sticky notes and mentioned a new group name on a sticky note, following the KJ method [17], which is a technique for finding ideas and solutions that go beyond conventional frameworks (Figure6). At this point, they collected both work and childcare values. This was designed to identify the overlap between work and childcare and recognize that work and childcare are not separate things that are in conflict with each other, but rather they coexist and create the same value.
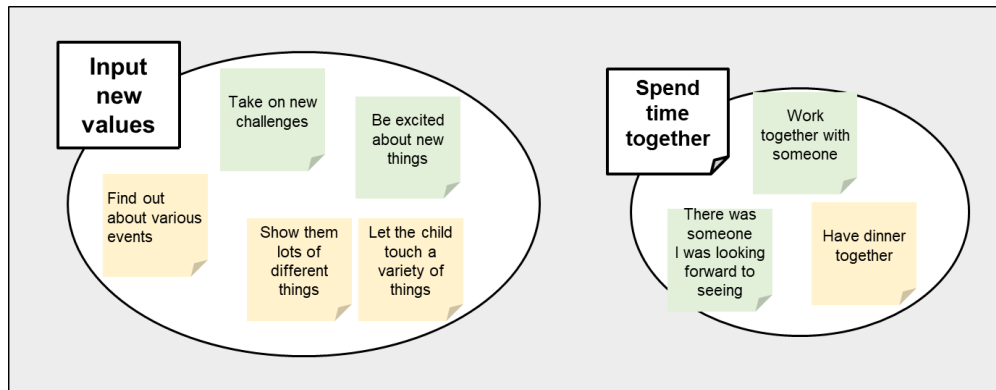

Figure 6: Grouping

In STEP 7, based on these steps, they created a slogan for "doing work and childcare that is true to yourself."

4   Evaluation Method

A controlled experiment was conducted with 23 working mothers, with children of elementary school age and younger, divided into an experimental group and a control group. We limited the age of the subject's children because of the higher WFC of mothers with young children [18]. The participants in the experimental group worked on the proposed method. The participants in the control group first worked on the existing method and then on the proposed method. We applied a life history graph as an existing method, as it is used to look back on the past and reflect on oneself, such as in the proposed method. The life history graph comprises a line graph with age on the horizontal axis and degree of fulfillment in past lives on the vertical axis (Figure 7). After creating this graph, the participants looked back on the characteristic events of their past, described how they felt at the time and how they feel now, considered their current situation, and finally thought about the future and described it. Both groups answered questionnaires before and after implementation of the method, and they answered another questionnaire three weeks later to confirm continuity of the effects of the method. We compared the experimental and control groups and compared the existing method with the proposed method within the control group.

The purpose of the questionnaire was to measure the extent to which the proposed method improved scales such as the sense of authenticity. The questionnaire items included the sense of authenticity scale [19], self-esteem scale [20], subjective well-being scale [21], abbreviated version of the Psychological Well-being Scale [22], and Japanese version of the WFE scale [23], and three questionnaire items we created. We inquired whether working mothers

felt they could balance work and childcare that related to their authentic selves. Furthermore, in the additional questionnaire three weeks after the experiment, we checked whether the sense of authenticity of working mothers and their behavioral changes continued to change. For the statistical analysis of the questionnaire results, after testing for normality, we selected the corresponding sample t-test or Wilcoxon signed rank sum method. Based on the content of the preliminary questionnaire, we divided the experimental and control groups into two to ensure that no significant differences remain in the attributes of the mothers (e.g., number of children, employment status, and educational background) and in the mean values of each rating scale.

This experiment was conducted with the approval of the Ethics Committee established at the Graduate School of System Design and Management, Keio University. We obtained informed consent from all participants before the experiment.
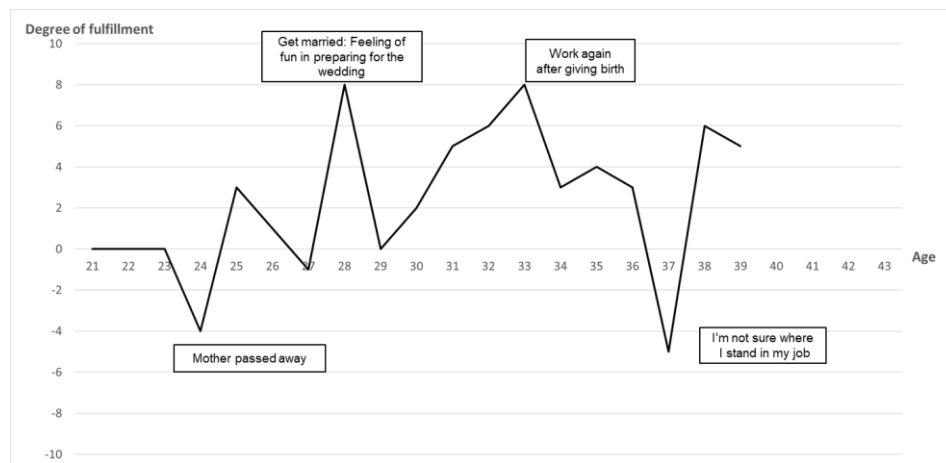

Figure 7: Existing method: Life history graph

5   Evaluation Results

5.1   Immediately After Work of the Method

Table 1 shows the results of the intergroup comparison for each scale before and after implementation of the method. Statistically significant differences are observed in the sense of authenticity and WFE in the experimental group, in which the proposed method is implemented. In addition, a significant difference is observed in the sense of authenticity compared with the counties in the control group (Table 2).

Table 3 shows results of the before-and-after comparison for each of the seven items in the sense of authenticity. Significant differences were observed in all items except for "2" and "4."

Table 1: Comparison of the experimental and control groups

		Average		P-value	
		Before	After		
Sense of Authenticity	Experimental Group: Proposed Method	3.560	4.036	0.005	**
	Control Group: Existing Method	3.831	3.961	0.2920	
Work Family Enrichment	Experimental Group: Proposed Method	3.894	4.144	0.0410	*
	Control Group: Existing Method	4.040	4.061	0.7670	
Self-esteem	Experimental Group: Proposed Method	2.917	3.025	0.1110	
	Control Group: Existing Method	2.845	3.000	0.0190	*
Subjective Well-being	Experimental Group: Proposed Method	3.156	3.172	0.7260	
	Control Group: Existing Method	3.121	3.139	0.3710	
Psychological Well-being	Experimental Group: Proposed Method	4.778	4.910	0.1250	
	Control Group: Existing Method	4.511	4.580	0.3960	

**Significant at P<0.01, *Significant at P<0.05

Table 2: Comparison of the existing and proposed methods within the control group

	Average		T-value	P-value	
	Proposed	Existing			
Sense of Authenticity	3.96	4.06	-2.67	0.024	*
Work Family Enrichment	4.06	4.05	0.11	0.918	
Self-esteem	3.00	3.02	-0.48	0.640	
Subjective Well-being	3.14	3.19	-0.99	0.347	
Psychological Well-being	4.58	4.72	-2.06	0.066	

*Significant at P<0.05

Table 3: Comparison of the experimental and control groups for each of items on the sense of authenticity scale

			Average		P-value	
			Before	After		
1	I can always be myself.	Proposed	3.833	4.250	0.0250	*
		Existing	4.000	4.180	0.0350	*
2	I have a "self" that is unwavering at all times.	Proposed	3.580	4.000	0.1020	
		Existing	3.910	3.910	0.4140	
3	I can be myself in front of other people.	Proposed	3.580	3.920	0.0460	*
		Existing	3.820	4.000	0.4140	
4	I often get depressed when I compare myself to others.	Proposed	3.580	3.750	0.1570	
		Existing	3.550	3.820	0.3340	
5	I can do the things I want to do.	Proposed	3.330	4.170	0.0260	*
		Existing	3.910	4.000	0.5640	
6	I have something that makes me feel like this is who I am.	Proposed	3.500	4.080	0.0380	*
		Existing	3.820	4.000	0.5770	
7	I can always stay true to myself.	Proposed	3.500	4.080	0.0350	*
		Existing	3.820	3.820	0.5770	

*Significant at P<0.05

Table 4 shows the results of our questionnaire items. In response to the question of whether mothers felt they could balance work and childcare that was true to themselves, the proposed method had a higher average than the existing method in both intergroup and intragroup comparisons, although no significant difference was confirmed. A significant difference was observed for the proposed method in the between-group comparison within the control group for the question regarding whether they recognize the values of childcare and work.

Table 4: Comparison of the experimental and control groups on the questionnaire items

		Intergroup		Intragroup	
		Average	P-value	Average	P-value
Compared to before doing the work, do you feel that you would be able to balance career and childcare that is true to themselves?	Proposed	3.810	0.478	4.250	0.0580
	Existing	3.750		3.750	
Compared to before doing the work, do you recognize your values regarding work and childcare?	Proposed	4.380	0.121	4.500	0.0380 *
	Existing	3.920		3.920	
Compared to before doing the work, do you feel that work and childcare have a positive influence on each other?	Proposed	3.690	0.982	4.000	0.4800
	Existing	3.830		3.830	

*Significant at P<0.05

5.2 Three Weeks After Work of the Method

We checked the status of the subsequent changes in participants using a questionnaire three weeks after the experiment. Table 5 shows the average scores for the sense of authenticity. All groups maintained a higher state than that before the experiment. Furthermore, for the experimental group, the average score after three weeks was 0.01 higher than that after the experiment. Regarding the status of behavioral change, 8 of 12 participants in the experimental group and 4 of 11 participants in the control group implemented some behavior, such as they "made working mother's own planning lists," "started Pilates trial," "set monthly goals for how I treat each family member," "started reviewing and investing in insurance received in the future," "spent more time reading the children's newspaper with my daughter," and "researched places we had never been and visited with children." Changes were observed in working mothers' personal behavior, behavior toward their family, and specific ways in which they spent time with their children.

Table 5: Comparison of the experimental and control groups after three weeks

		Average			Difference	
		(A) Before	(B) After	(C) 3 weeks later	(C)-(A)	(C)-(B)
Sense of Authenticity	Experimental Group	3.56	4.04	4.05	0.49	0.01
	Control Group	3.83	4.06	3.87	0.04	-0.19

6   Discussion

Comparing Tables 1 and 2 indicates that the proposed method increases the sense of authenticity of working mothers, which is the objective of this study, and validates significant differences in the sense of authenticity scale. Table 3 shows that significant differences are observed for all items of the sense of authenticity except for "2" and "4." The average score of "2" increased from 3.58 to 4.00, although no significant difference was observed. Here, the proposed method focuses on self-reflection and does not incorporate a process for comparing oneself with others; therefore, no significant difference is observed for "4." We intended this response while constructing the method. Moreover, significant differences were observed for WFE, indicating that the proposed method increased both the sense of authenticity and WFE. We assume that STEP6, recognizing common values of work and childcare through grouping work and childcare values, in particular has changed their thought, based on their reactions after the experiment

Furthermore, the average score of the sense of authenticity scale three weeks after the implementation of the proposed method (Table 5) remained higher than the score before and after the implementation of the proposed method, suggesting the effectiveness of the proposed method. We anticipated that the scores on the sense of authenticity would decrease since working mothers had to deal with their daily conflicts in balancing work and childcare after the experiment. Therefore, it was unexpected that, three weeks after the experiment, a large percentage of working mothers were positively motivated to take concrete actions. The proposed method helped ensure that the balance between work and childcare was long lasting and did not appear only immediately after working on it. Although no significant difference was observed in the proposed method regarding whether it would be possible to balance work and childcare that was true to oneself, the average value of the proposed method was higher than that of the existing method for all comparisons, suggesting its validity.

This study has some limitations. First, the sample size was small. In this study, the participants in the experimental group were analyzed by the type of mother, such as based on age of the oldest child, type of employment status of the mother, and differences in the level of awareness of the mother's role in childcare. However, owing to the small number of participants, it was difficult to generate differences in the results.

Second, the analysis by type of mother revealed a significant difference in the sense of authenticity observed before and after the proposed method for the group with higher awareness that mothers should assume the role of childcare than for the group with lower awareness. Although mothers' awareness of their role changes depends on their relationship with their husbands, which influences their identity integration, we do not consider their relationship with their husbands (e.g. income difference and time allowance) or involve their husbands in the experiment. Efforts to improve the sense of authenticity of working mothers should be based on their relationships with their husbands.

7   Conclusion

This study proposed a method that allows working mothers to experience a higher sense of authenticity in both work and childcare and fee can do balance work and childcare that relate

to their authentic selves to assuage the daily conflicts they face in balancing work and child-care. The results show that the proposed method is effective as a psychological coping method because it increases the sense of authenticity of working mothers.

While establishing the proposed method, we requested several male friends with children to work with the proposed method. We found that they also faced problems between work and family and that the implementation made them aware of the need to balance work and family. In the future, we would conduct research with fathers as participants since the relationship with fathers is influenced by the sense of authenticity of mothers. In addition, we would implement the proposed method with both mothers and fathers and married couples. By working together with the proposed method, couples can recognize the gap between their values and each other's and can contribute to reconciling their roles in the family and how to manage the family. We believe that this will reduce dissatisfaction with each other and help create a more comfortable home environment for their children. We intend to continue our research in this area.

References

[1] Gender Equality Bureau Cabinet Office, Government of Japan, "The White Paper on Gender Equality 2023" Figure SF-2: Change in work styles by age group, 2023.

[2] National Institute of Population and Social Security Research, "Marriage and Childbirth in Japan Today: The Sixteenth Japanese National Fertility Survey, 2021 -Results of Singles and Married Couples Survey-", 2023.

[3] S. Mochida and M. Okada "Work-family Balance Strategies of Japanese Working Mothers and Their Adaptation Process at Work," Japanese Association of Industrial/Organizational Psychology Journal, vol. 34, no. 2, 2021, pp.147-163.

[4] R.L. Kahn, D.M. Wolfe, and R.P. Quinn, Organizational Stress: Studies in Role Conflict and Ambiguity, Wiley, 1964.

[5] J.H. Greenhaus and N.J. Beutell, "Sources of Conflict Between Work and Family Roles," Academy of Management Review, vol. 10, no. 1, 1985, pp. 76-88.

[6] J.H. Greenhaus and G.N. Powell, "When Work and Family are Allies: A Theory of Work Family Enrichment," Academy of Management Review, vol. 31, no. 1, 2006, pp. 72-92.

[7] N. Gayathri and P. Karthikeyan, "The Role of Self-efficacy and Social Support in Improving Life Satisfaction: The Mediating Role of Work-family Enrichment," Zeitschrift für Psychologie, vol. 224, 2016, pp. 25-33.

[8] W.E.W. Rashid et al., "Work/Family Conflict: The Link Between Self-Esteem and Satisfaction Outcomes," Procedia-Social and Behavioral Sciences, vol. 65, 2012, pp. 564-569.

[9] E.L. Deci and R.M. Ryan, "Human Autonomy: The Basis for True Self-esteem," Efficacy, Agency, and Self-esteem, M.H. Kernis, ed., Plenum, 1995, pp. 31-49.

[10] M.H. Kernis, "Optimal Self-esteem and Authenticity: Separating Fantasy from Reality," Psychological Inquiry, vol. 14, no. 1, 2003, pp. 1-26.

[11] M. Ito and M. Kodama, "The Relationships of Sense of Authenticity with Daily Life Activities and Interpersonal Relationships" The Japanese Journal of Health Psychology, vol. 19, no. 2, 2006, pp. 36-43.

[12] A. Yamasaki, "A Self-conceptual Descriptive Study of Childrearing Women and Their Family—Analyses of 'The Self as a Mother' and 'The Self as an Individual with a Life of Their Own'," Journal of Japan Academy of Nursing Science, vol. 17, no. 4, 1997, pp. 1-10.

[13] F. Toyota and Y. Okamoto, "Conflicts Between Mother-self and Personal-self and Integration of Two Selves: Relationship with Difficulties in Child Caring," Hiroshima Psychological Research, vol 6, 1996, pp. 201-222. https://doi.org/10.15027/19561

[14] A.I. Garey, Weaving Work and Motherhood, Temple University Press, 1999.

[15] Y. Okamoto, "A Study on Women's Identity and Family-Relationship in Child-Rearing Stage," Faculty of Education, Hiroshima University, Higashi-Hiroshima, 739, 2016. http://dl.ndl.go.jp/info:ndljp/pid/10581273

[16] D.E. Super, "A Life Span, Life-Space Approach to Career Development," Journal Vocational Behavior, vol. 16, 1980, pp. 282-298.

[17] J. Kawakita, "The KJ Method: Seeking Order Out of Chaos," Chuokoron-Sha, Tokyo, 1986.

[18] Allen, Tammy D and Finkelstein, L.M, "Work-family conflict among members of full-time dual-earner couples: An examination of family life stage, gender, and age," Journal of Occupational Health Psychology, vol. 19, no. 3, 2014, pp. 376-384.

[19] M. Ito and M. Kodama, "Sense of Authenticity, Self-Esteem, and Subjective and Psychological Well-Being," Japanese Journal of Educational Psychology, vol. 53, 2005, pp. 74-85.

[20] C. Mimura and P. Griffiths, "A Japanese Version of the Rosenberg Self-Esteem Scale: Translation and Equivalence Assessment," Journal of Psychosomatic Research, vol. 62, no. 5, 2007, pp. 589-594.

[21] Y. Ito et al., "Reliability and validity of Subjective Well-Being Scale," The Japanese Journal of Psychology, vol. 74, no. 3, 2003, pp. 276-281.

[22] S. Iwano et al., "Development of a Brief Psychological Well-Being Scale," Behavioral Science Research, vol. 54, no. 1, 2015, pp. 9-21.

[23] H. Takeyuki, "Development of the Japanese Version of Work-Family Enrichment Scale and Examination of its Psychological Process," Japanese Association of Industrial/Organizational Psychology Journal, vol. 31, no. 2, 2018, pp. 139-154.