

The Double Mediating Effect of Caregiving Mastery and Self-Esteem on the Effect of Family Caregiver's Elderly Caregiving Burden on Family Conflict

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Abstract

Background: The long-term care insurance system for the elderly is being implemented as a social support for the elderly in need of care. As of 2022, as the use of adult day care centre among home benefits is on the rise, it is necessary to devise measures to reduce the caregiving burden and family conflicts targeting the caregivers of the elderly who use adult day care centre.

Objectives: The purpose of this study is to examine the dual mediating effect of caregiving mastery and self-esteem on the relationship between caregiving burden and family conflict.

Methods: In this study, 304 caregivers of the elderly who received a long-term care grant and were using an adult day care centre were targeted. The data were analysed using SPSS PC+ Win. 24.0 and SPSS PROCESS macro 4.1. Applied statistical techniques were descriptive statistics, reliability analysis, correlation analysis, and double mediating effect analysis.

Results: First, the age and length of support for caregivers increased the caregiving burden, but the health and economic status of caregivers lowered the caregiving burden and family conflict, and improved caregiving mastery and self-esteem. Second, the caregiving burden of the family caregiver was 2.51 points (out of 5 points) and family conflict was low at 1.85 points (out of 5 points). The parameter, caregiving mastery, was at 3.40 points (out of 5 points) and self-esteem was at 3.40 points (out of 4 points), which is a fairly high level. Third, the higher the caregiving burden, the higher the family conflict was, but the effect of the caregiving burden on family conflict through caregiving mastery and self-esteem was lowered.

Conclusions: In order to reduce the impact of the burden of care on family conflict, it is necessary to improve the ability to solve problems in a positive way, such as mastery of caring and self-esteem. This suggests that adult day care centre need to provide caring education for family caregivers to increase their caring skills and provide counselling to improve their self-esteem.

Keywords: double mediating effect, caregiving mastery, self-esteem, caregiving burden, family conflict

1. Introduction

According to the 2020 Statistical Yearbook of Long-term Care Insurance for the Elderly in Korea, the number of elderly in need of long-term care had exceeded 950,000 [1]. These results are significantly higher than initially predicted, suggesting that the elderly population in need of care is rapidly increasing. Fortunately, there is a shift in the perception of caring for the elderly, which was

previously recognized as the responsibility of the family, into a social and national responsibility [2], but family support still occupies an absolute proportion in the care of the elderly.

Caregiving for the elderly leads to the burden of caregiving for family caregivers, and that is a cause of conflict between families. According to the [3], 27.0% of household with adult children spent one year on caregiving them, and 32% said the family economy is difficult due to caregiving for the elderly. This increased household burden is leading to family conflict [4]. And, the physical fatigue of aging caregivers due to prolonged caregiving continues to accumulate [5], and family conflict tends to intensify when caring for the elderly with chronic diseases such as dementia for a long time [6].

Of course, conflict exists in any organization, in any society, and there is no conflict-free relationship [7], so a family should not be an exception. However, there is a problem that family conflicts are easily revealed as violent behaviour because they accumulate for a long time and are expressed explosively at some point [8]. A bigger problem is that the caregiving burden and the resulting family conflict sometimes lead to abuse of the elderly, the weakest in the family. Therefore, in order to protect the elderly and their family caregivers, a study on intermediate variables that can reduce the negative impact of the caregiving burden on family conflict is needed. Therefore, this study aims to find a way to mediate the relationship between the caregiving burden and family conflict by targeting the family caregivers of the elderly who have received the long-term care grade requiring long-term caregiving.

Caregiving mastery may be considered as a parameter. Caregiving mastery is one of the abilities to solve the various problems that arise in caring. As a psychological resource [9] that reduces the negative consequences of caring for elderly parents with chronic diseases, it can relieve the caregiving burden and anxiety that families experience while caring for elderly parents [10]. Women with higher caregiving mastery had higher psychological well-being [11-13]. In the relationship between the patient's problem behaviour and the caregiver's depression, caregiving mastery has a depressive buffering effect [9].

In addition, self-esteem is one of the problem-solving abilities for resolving family conflicts caused by the caregiving burden. Self-esteem is an overall evaluation of self-worth, including individual expectations for positive self-evaluation [14]. People with high self-esteem lead an energetic and enterprising life [15,16], and are highly social, extrovert, and active [17-19]. When self-esteem is high, organizational adaptability and interpersonal relationships are also positive [20].

Caregiving mastery and self-esteem are expected to play a positive role in the effects of caregiving burden on family conflict. Therefore, this study aims to analyse the double mediating effect of caregiving mastery and self-esteem. In order to verify the double mediation effect, four-step rationale is needed. There must be a rationale for the effect of caregiving burden on family conflict and caregiving mastery, the effect of caregiving mastery on self-esteem, and the effect of self-esteem on family conflict. Since the relationship between the caregiving burden and family conflict, which is the relationship between the independent variable and the dependent variable, has been discussed previously, the relationship between the caregiving burden and caregiving mastery, caregiving mastery and self-esteem, self-esteem and family conflict will be examined.

First, the higher the caregiving burden, the lower the caregiving mastery is predicted. Previous researchers ([9, 21]) argued that caregiving mastery of family caregivers improved as the patient

needed more help with daily activities. The more the caregiver takes care of, the better the care will be, and accordingly, the higher the caregiving mastery. However, since the caregiving burden is a burden that comes from providing a lot of care, it is predicted that the higher the caregiving burden, the lower the caregiving mastery. However, there were no studies that directly analysed.

Second, the higher the caregiving mastery, the higher the self-esteem is predicted. The more they feel they are good caring for the elderly, the more they feel they are in need, useful and productive [22]. In addition, those who positively perceive their ability to care for patients feel that taking care of patients is beneficial to them [23], and this positive perception leads to improved self-esteem. And, it is difficult to maintain a positive self-image because work-related demands and responsibilities cannot be properly performed [24, 25], which in turn leads to a decline in self-esteem [26, 27]. Based on these studies, it is inferred that self-esteem will be improved if a positive experience of coping well with parents' various care needs due to high caregiving mastery is accumulated. Therefore, if the difficulties of caring for sick elderly parents are successfully resolved through caregiving mastery, self-esteem can be increased.

Lastly, it is predicted that the higher the self-esteem, the lower the family conflict. Differences in self-esteem play an important role in determining the direction individuals face when they face various events in their daily lives [28]. This is because it has a protective function against influence [29, 30]. There are a number of studies examining the mediating effect of self-esteem on the relationship between stress and depression [31-33]. The stress-mediated effect was also verified in family conflict. Nolan et al. [22] found that caring for the patient was meaningful when the caregiver felt that the caregiver was a person in need, useful and productive, and felt less conflict in the family.

On the other hand, in Korea, where the current population is rapidly aging, a culture that encourages 'filial piety' for caring for the elderly and the 'long-term care insurance system for the elderly' that institutionalizes social responsibility for the aged care coexist. Among the long-term care insurance for the elderly, the number of adult day care centre and the number of elderly using them are increasing remarkably [1]. In Korea, adult day care benefits of providing recipients with care in a facility for a number of hours a day to support their physical activity and provide training and education in order to help them maintain and improve their mental and physical functions. As of the end of 2020, in home benefits accounted for 61.3% and facility benefits accounted for 38.7% of the Corporation's contribution. Compared to the previous year, the rate of increase in contributions from the Corporation was 18.4% for in home benefits and 6.9% for facility benefits. As the use of adult day care centre is on the rise among in home benefits, in this study, family caregivers of the elderly using adult day care centre were selected as the subject of this study.

Combining these previous studies, it is predicted that the caregiving burden and family conflict of family caregivers taking care of the elderly and the mediating role of caregiving mastery and self-esteem in these relationships are expected. However, previous studies([35-38]) targeting caregivers using day care centres lacked interest in this. However, research has focused only on whether the caregiving burden of family caregivers is reduced by the use of adult day care centre for the elderly. Combining previous studies on caregiving caregivers using adult day care centre, the caregiving burden and family conflict still remain, even though the use of day care by the elderly has played a role in reducing the caregiving burden of family caregivers. Caregiving mastery and self-esteem were predicted to mediate the relationship, but related studies were lacking. Accordingly, there is a

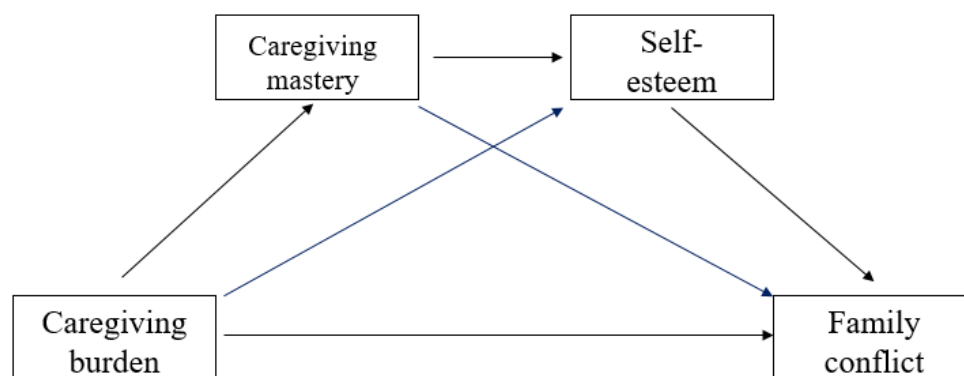
need for a study on how to mediate the relationship between the caregiving burden and family conflict of elderly family caregivers who use adult day care centre.

2. Objectives

The purpose of this study is to examine the dual mediating effect of caregiving mastery and self-esteem on the relationship between caregiving burden and family conflict.

3. Methods

The model of this study is shown in Figure 1. Figure 1 is a model that assumes the dual mediating effect of caregiving mastery and self-esteem in the effect of caregiving burden on family conflict.



[Figure 1] Research Model

2) Research subjects and data collection procedures

In this study, data of Lee [39], who surveyed 304 primary family caregivers of the elderly who used adult day care centre for one month in June 2021, was used in this study. At the day care centre, care workers visit each home to pick up the elderly and drive them home after the program at the adult day care centre is over. Using this time, the primary caregiver was asked to respond to the questionnaire, and it was retrieved a week later. 320 copies were distributed and 313 copies were collected. Of them, 304 copies were used for analysis, excluding 9 copies, not the primary family caregiver.

3) Instruments

For the caregiving burden, a 12-item subjective burden scale, a 5-point Likert-type scale (1=not at all, 5=strongly agree) was used among the scales developed by Montgomery et al. [40]. The two items were reverse-coded. A higher score means a higher level of caregiving burden. The reliability of the scale is Cronbach's alpha value of .817. For family conflict, the 5-item, 5-point Likert-type scale used by the Korea Welfare Panel [41] was used (1 = not at all, 5 = very much). A higher score indicates a higher level of family conflict. The reliability of the scale is Cronbach's alpha value of .801.

caregiving mastery used the Caregiving Mastery Subscale, which measures 'general caring ability' among the Caregiving Appraisal Scale developed and modified by Lawton et al. [10]. It is a total of 11 items, a 5-point Likert-type scale (1 = not at all, 5 = very much), and the two items are reverse-

coded, so a higher score means a higher caregiving mastery. The reliability of the scale is Cronbach's alpha value of .878.

For self-esteem, Rosenberg's[42] self-esteem scale was used. It is a 10-item, 4-point Likert-type scale consisting of 5 items of positive self-esteem and 5 items of negative self-esteem (1=not at all, 4=strongly agree). Negative self-esteem items are reverse-coded, and a higher score means a higher level of self-esteem. The reliability of the scale is Cronbach's alpha value of .732.

4) Characteristics of research subjects

The family caregivers of the elderly who used adult day care centre were 76.0% female, those aged 50 to 64 accounted for the most at 57.9%. High school graduates accounted for 41.8% and married 82.6%. In terms of both health and economic status, the most common cases were 51.3% and 71.7%, respectively. The average period of care was 8.96 years, with 27.0% for 'more than 2 to less than 5 years', 23.0% for 'more than 5 years to less than 10 years', and 20.11% for 'more than 10 years'.

5) Analysis method

Frequency analysis and correlation analysis were performed using SPSS Win 24.0 ver., and double mediation effect analysis was performed using model 6 of SPSS PROCESS MACRO 4.1 ver.

4. Results

1) Relationships among caregiver characteristics, caregiving burden, caregiving mastery, self-esteem, and family conflict

Correlation analysis was performed to determine the relationship between the characteristics of caregivers, caregiving burden, caregiving mastery, self-esteem, and family conflict (Table 1).

As a result, the older the caregiver, the higher the caregiving burden ($r=.145$, $p<.01$). The better the health of the caregivers, the lower the caregiving burden ($r=-.177$, $p<.01$), the lower the family conflict ($r=-.134$, $p<.01$), and the higher the caregiving mastery ($r=.187$, $p<.01$). and high self-esteem ($r=.215$, $p<.001$). The better the economic status of the dependents, the lower the caregiving burden ($r=-.212$, $p<.01$), the lower the family conflict ($r=-.173$, $p<.01$), and the higher the caregiving mastery ($r=.172$, $p<.01$) and higher self-esteem ($r=.199$, $p<.001$). The longer the caregiving length, the higher the caregiving burden ($r=.242$, $p<.001$), and the lower the caregiving mastery ($r=-.141$, $p<.05$).

However, the correlations between the gender, education level, marital status and burden of support, caring ability, self-esteem, and family conflict of the caregivers were insignificant and were not presented in the table.

<Table 1> Relationships among caregiver characteristics, caregiving burden, caregiving mastery, self-esteem, and family conflict

<n=304>

	caregiving burden	caregiving mastery	self-esteem	family conflict

caregiver characteristics	age	.145*	-.067	-.088	-.001
	health status	-.177**	.187**	.215***	-.134*
	economic status	-.212**	.172**	.199***	-.173**
	caregiving length	.242***	-.141*	-.085	.058

* p<.05, ** p<.01, *** p<.001

2) Mean and Standard Deviation of Variables and Correlation Between Variables

Before verifying the research model, the correlation between each variable was checked. As shown in Table 2, the correlation between all variables was significant. Focusing on the dependent variable family conflict, the higher the caregiving burden, the higher the family conflict ($r=.426$, $p<.001$), but the higher caregiving mastery ($r=-.229$, $p<.001$) and the higher self-esteem ($r=-.300$, $p<.001$), the lower the family conflict. The correlation coefficient ranges from $-.229$ to $.426$, indicating that there is no problem of multicollinearity.

Also, looking at the mean and standard deviation of each variable, the caregiving burden was 2.51 out of 5, which was lower than the median, the caregiving mastery was 3.40, which was higher than the median, and the family conflict was 1.85, which was quite low. Self-esteem is a fairly high level of 3.40 out of 4 points. Therefore, the independent and dependent variables were low, while the parameters, caregiving mastery and self-esteem, were high.

<Table 2> Mean and Standard Deviation of Variables and Correlation Between Variables

<n=304>

	caregiving burden	caregiving mastery	self-esteem	family conflict
caregiving burden				
caregiving mastery	-.412***			
self-esteem	-.352***	.343***		
family conflict	.426***	-.229***	-.300***	
M(S.D)	2.51(.585)	3.40(.570)	3.40(.386)	1.85(.724)

*** p<.001

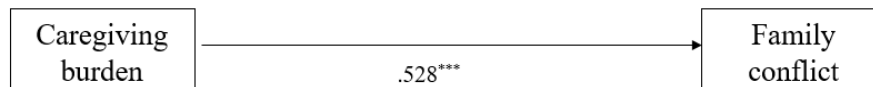
3) The double-mediated effect of caregiving mastery and self-esteem on the effects of caregiving burden on family conflict

The results of the double mediation effect analysis using MACRO 4.1 ver. are presented in Tables 2 to 5, Figure 1, and Figure 2. The caregiving burden of family caregivers using day care centers was found to have a positive effect on family conflict (Table 3, Figure 2). In other words, the higher the caregiving burden, the higher the family conflict.

<Table 3> Effect of caregiving burden on family conflict

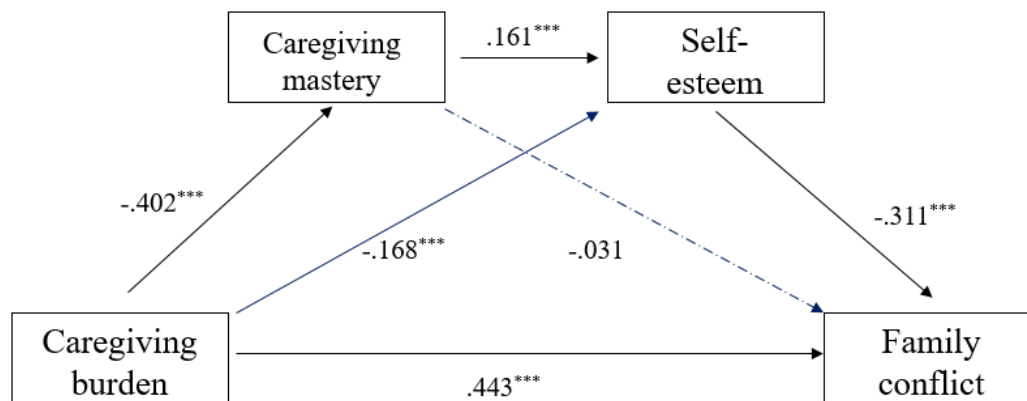
<n=304>

Dependent	Independent	coeff	se	t	p	LLCI	ULCI	R ²
family conflict	constant	.524	.166	3.152	.002	.197	.851	.181
	caregiving burden	.528	.064	8.184	.000	.401	.654	



[Figure 2] Effect of caregiving burden on family conflict

Next, the double mediating effect of caregiving mastery and self-esteem was verified in the effect on the caregiving burden of family caregivers. The influence of caregiving burden on family conflict through caregiving mastery and self-esteem was .443($p < .001$), which was lower than the influence of caregiving burden on family conflict of .528($p < .001$). Therefore, the effect on the caregiving burden of family caregivers was found to be reduced by caregiving mastery and self-esteem.



[Figure 3] The double-mediated effect of caregiving mastery and self-esteem on the effects of caregiving burden on family conflict

<Table 4> The double-mediated effect of caregiving mastery and self-esteem on the effects of caregiving burden on family conflict

<n=304>

Dependent	Independent	coeff	se	t	p	LLCI	ULCI	R ²
Caregiving mastery	constant	4.411	.132	33.471	.000	4.152	4.670	.170
	caregiving burden	-.402	.051	-7.851	.000	-.502	-.301	

Self-esteem	constant	3.275	.194	16.920	.000	2.894	3.656	.171
	caregiving burden	-.168	.038	-4.414	.000	-.242	-.093	
	caregiving mastery	.161	.039	4.140	.000	.085	.238	
family conflict	constant	1.902	.497	3.825	.000	.924	2.881	.208
	caregiving burden	.443	.072	6.143	.000	.301	.584	
	caregiving mastery	-.031	.074	-.426	.670	-.176	.114	
	self-esteem	-.311	.106	-2.934	.004	-.520	-.103	

Lastly, in order to test the double-mediated effect of caregiving mastery and self-esteem on the relationship between caregiving burden and family conflict, first, the relationship between the parameters must be significant. As shown in Table 4, the effect of caregiving mastery on self-esteem was significant (.161, $p < .001$). That is, the higher the caregiving mastery, the higher the self-esteem (Table 4, Figure 3), so the double-mediated effect was verified.

And, the significance of the indirect effect should be verified. In order to verify the significance, 5,000 times of bootstrapping were specified, and the confidence interval was set to 95%, and effect analysis was performed (Table 5). The size of the total indirect effect was .085 (.022 to .152), and there was no value of 0 at the 95% confidence interval, indicating that a double-mediated effect existed. In addition, the size of the indirect effect of the caregiving burden→caregivingmastery→self-esteem→family conflict pathway was .020 (.007~.037), there was no value of 0 at the 95% confidence interval, so the double-mediated effect was verified.

Also, caregiving burden→Caregivingmastery→family conflict was not significant, and caregiving burden→self-esteem→Self-esteem→family conflict was significant. That is, the simple mediating effect of caring skills was not significant, whereas the simple mediating effect of self-esteem was significant (Table 5).

<Table 5> Verification of the indirect of caregiving mastery and self-esteem

<n=304>

	Effect	BootSE	BootLLCI	BootULCI
caregiving burden→Caregivingmastery→family conflict	.013	.026	-.036	.064
caregiving burden→self-esteem→Self-esteem→family conflict	.052	.020	.017	.095
caregiving burden→Caregivingmastery→elf-esteem→family conflict	.020	.008	.007	.037
Total indirect effect	.085	.034	.022	.152

Combining the results of Tables 3 to 5, Figure 2, and Figure 3, the higher the caregiver's caregiving burden, the more severe the family conflict. However, the more proficient in caring for the elderly and the higher the self-esteem, the lower the family conflict.

5. Discussion

The purpose of this study was to examine the dual mediating effect of caregiving mastery and self-esteem on the relationship between caregiving burden and family conflict, targeting caregivers of the elderly who received a long-term care grant and were using a day care center for the elderly. Frequency and correlation analysis were performed using SPSS Win 24.0 ver, and double mediation analysis was performed using model 6 of SPSS PROCESS MACRO 3.5.4 ver. Discussion and suggestions while summarizing the research results are as follows.

First, the age and length of support for caregivers increased the caregiving burden, but the health and economic status of caregivers lowered the caregiving burden and family conflict, and improved caregiving mastery and self-esteem. Considering that the physical fatigue of the caregivers due to prolonged elderly care heightens family conflict [5] (Andrew et al., 2015), and the proportion of adult children who say that the household is burdensome because of the elderly care accounted for 32% [3] (Korean Statistics Office, 2018), it can be seen that the health and economic status of the caregiver are buffer resources that alleviate the caregiving burden and family conflict. Therefore, day care centres that focus on the care of the elderly need to pay attention to the health of family caregivers, and in Korea's welfare policy for the elderly, it is necessary to formulate policies that consider the economic situation of the caregivers. For example, it is suggested that policies such as tax benefits or government subsidies are necessary for families who caregiving the elderly for more than a certain period of time.

Second, the caregiving burden of the family caregiver was 2.51 points (out of 5 points) and family conflict was low at 1.85 points (out of 5 points). The parameter, caregiving mastery, was at 3.40 points (out of 5 points) and self-esteem was at 3.40 points (out of 4 points), which is a fairly high level. In other words, the outcomes of caregiving such as the caregiving burden and family conflict were low, but the caregiving burden problem-solving ability of the caregivers such as caring ability and self-esteem was high. In particular, the level of caregiving mastery was higher than that of previous studies. Although it is difficult to make an absolute comparison due to the different number of items, in a study by Miller et al. [9] for families caring for dementia patients, caregiving mastery scored 14.49 out of 30 and in Lawton, Moss, Hoffman &Perkinson[43] study of elderly caregivers, the score was 23.09 out of 30, indicating that the caregiving mastery of the subjects of this study was higher.

Therefore, it can be interpreted that caregiving mastery and self-esteem of caregivers who use public support services such as adult day care centres are high. However, it is difficult to make a conclusion because a comparative analysis was not conducted between the caregivers who provided only private support services, those who used both private and public support services, and those who used only public support services. Also, it is not known whether the caregivers with high caregiving mastery and self-esteem choose to use the adult day care centre, or whether the use of the adult day care centre enhances the caregiving mastery and self-esteem. As mentioned earlier, in Korea, caring for the elderly at home is considered filial piety, so they tend to be reluctant to use public support services. Nevertheless, the self-esteem may have been high enough to choose to use

the adult day care centre, or the increased time and health due to the use of the adult day care centre may have improved the self-esteem. Therefore, a rigorous research design that can elucidate this in the future research is required.

Third, the higher the caregiving burden, the higher the family conflict was, but the effect of the caregiving burden on family conflict through caregiving mastery and self-esteem was lowered. Therefore, the effect on the caregiving burden of family caregivers was found to be reduced by caregiving mastery and self-esteem. Also, in the analysis examining the significance of the indirect effect, the path of the caregiving burden on family conflict through caregiving mastery and self-esteem was significant, so the double-mediating effect was verified.

This result is partially consistent with previous studies on the relationship between caregiving burden and family conflict [4, 6, 44], caregiving burden and caregiving mastery [9, 21], caregiving mastery and self-esteem [22-24, 26, 27], and self-esteem and family conflict [22].

Therefore, in order to reduce the impact of the burden of care on family conflict, it is necessary to improve the ability to solve problems in a positive way, such as mastery of caring and self-esteem. This suggests that adult day care centres need to provide caring education for family caregivers to increase their caring skills and provide counselling to improve their self-esteem. Such education and counselling may directly reduce the caregiving burden and family conflict, as well as reduce the negative impact of the caregiving burden on family conflict through improvement of caregiving mastery and self-esteem. In particular, considering that the majority of caregivers are women, and the caregiving burden increases as the age of the caregivers increases and the length of caregiving increases, such education and counselling should be provided preferentially to the elderly female caregivers who have been caregiving their husbands for a long time.

Fourth, it is worth noting that the path leading to family conflict through the caregiving burden through caregiving mastery was not significant, whereas the path leading to family conflict through the caregiving burden through the caregiving mastery and self-esteem was significant. That is, considering that caregiving mastery affects family conflict only through self-esteem, it is suggested that the development and implementation of a self-esteem improvement program through caring education is also necessary. In addition, it is necessary to provide policy support to adult day care centres to provide caregiver education and counselling. For example, it is necessary to dispatch professional manpower who can provide education and counselling, or support the cost of caregiver education and counselling for caregivers. Currently, adult day care centres in Korea do not provide services for family caregivers. However, education and counselling are being conducted sporadically in the form of meetings at individual adult day care centres according to the will of the centre director. Therefore, since caregiving the elderly is linked to family conflict, it is suggested that active policy interest and support are needed not only for the elderly but also for the families surrounding the elderly.

As such, in this study, the double-mediated effects of caregiving mastery and self-esteem were investigated in the effect of caregiving burden on family conflict by targeting caregivers who use adult day care centres to support their elderly parents for a long period of time, thereby reducing the caregiving burden and family conflict. It is meaningful to suggest a way to reduce it. Nevertheless, this study reveals that there is a limit to generalizing to all dependents because the survey was limited to one region in Korea.

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References

- [1]. National Health Insurance Corporation. 2021 Long term care insurance statistical yearbook [Internet]. [Cited 2022, 09,03. Available from: <https://www.nhis.or.kr/nhis/together/wbhaec07200m01.do?mode=view&articleNo=10820535>
- [2]. Park Y.M., Kwak M.J. A study on the improvement of utilization and cognition of users for the Long-Term Care Insurance System. *Consumer Policy and Education Review*. 2019;15(1):237-261.
- [3]. National Statistical Office of Korea. Social trends in Korea 2018 [Internet]. [Cited 2018]. Available from: kostat.go.kr.
- [4]. Ahn J.Y., Han E.Y. A Study on the Family Conflicts in the Elderly Supporting. *Korean Journal of Gerontological Social Welfare*. 2013;61:267-290. Available from: <https://www.dbpia.co.kr/Journal/articleDetail?nodeId=NODE07430051>
- [5]. Andrew N.E., Kilkenny M.F., Naylor R., Purvis T., Cadilhac D.A. The relationship between caregiver impacts and the unmet needs of survivors of stroke. *Patient Preference and Adherenc*. 2015;9:1065-1073. Available from: <https://doi.org/10.2147/PPA.S85147>
- [6]. Song D.Y. Welfare and care paradigm by life cycle from a feminist perspective. *Issues in Feminism*. 2013;13(1):93-129.
- [7]. Berry M.J. Beyond Chadha: The modern legislative veto as macropolitical conflict (Doctoral dissertation, University of Colorado at Boulder). 2008.
- [8]. Kim S.U. Conflict differentiation and accrossing in everyday life social relations. *Korean Sociological*. 2008;9(1):53-94.
- [9]. Miller B., Campbell R.T., Farran C.J., Kaufman J.E., Davis L. Race, control, mastery, and caregiver distress. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 1995;50(6):S374-S382. Available from: <https://doi.org/10.1093/geronb/50B.6.S374>
- [10]. Lawton M.P., Kleban M.H., Moss M., Rovine M., Glicksman A. Measuring caregiving appraisal. *Journal of Gerontology*. 1989;44(3):61-71. Available from: <https://doi.org/10.1093/geronj/44.3.P61>
- [11]. Martire L.M., Stephens M.A.P., Townsend A.L. Emotional support and well-being of midlife women: Role-specific mastery as a mediational mechanism. *Psychology and Aging*. 1998;13(3):396-404. Available from: <https://doi.org/10.1037/0882-7974.13.3.396>
- [12]. Christensen K.A., Stephens M.A.P., Townsend A.L. Mastery in women's multiple roles and well-being: Adult daughters providing care to impaired parents. *Health Psychology*. 1998;17(2):163-171. Available from: <https://doi.org/10.1037/0278-6133.17.2.163>
- [13]. Berg-Weger M., Rubio D.M., Tebb S.S. The caregiver well-being scale revisited. *Health & Social Work*. 2000;25(4):255-263. Available from: <https://doi.org/10.1093/hsw/25.4.255>
- [14]. Maddux J.E. Self-Efficacy Theory. In: Maddux J.E. (eds) *Self-efficacy, adaptation, and adjustment. The Plenum Series in Social/Clinical Psychology*. Springer, Boston, MA. 1995. Available from: https://doi.org/10.1007/978-1-4419-6868-5_1

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- [15]. Bae N.R, Park C.S. A study on the ecological factors affecting the quality of life among the elderly people. *The Korean Gerontological Society*. 2009;29(2):761-779. KMID : 0379220090290020761
- [16]. Battle J. Relationship between self-esteem and depression. *Psychological Reports*. 1978;42(3):745-746. Available from: <https://doi.org/10.2466/pr0.1978.42.3.745>
- [17]. Cheek J.M., Buss A.H. Shyness and sociability. *Journal of Personality and Social Psychology*. 1981;41(2):330-339. Available from: <https://doi.org/10.1037/0022-3514.41.2.330>
- [18]. Halamandaris K.F., Power K.G. Individual differences, dysfunctional attitudes, and social support: A study of the psychosocial adjustment to university life of home students. *Personality and Individual Differences*. 1997;22(1):93-104. Available from: [https://doi.org/10.1016/S0191-8869\(96\)00175-4](https://doi.org/10.1016/S0191-8869(96)00175-4)
- [19]. Leary MR, MacDonald G. Individual differences in trait self-esteem: A theoretical integration. In M. Leary & J. Tangney (Eds.), *Handbook of self and identity*. New York: Guilford Press. 2003:401–418.
- [20]. Jeon H.S. The effect of achievement goal orientation and self-esteem of adolescent athletes on self-pretext. Seoul university. 2010.
- [21]. Kim J.H. Relationships among health perception, caregiving mastery, and general well-being in family caregivers of stroke patients. Ewhawomans university. 2002.
- [22]. Nolan M., Keady J., Grant G. Developing a typology of family care: implications for nurses and other service providers. *Journal of Advanced Nursing*. 1995;21(2):256-265. Available from: <https://doi.org/10.1111/j.1365-2648.1995.tb02522.x>
- [23]. Aneshensel C.S., Pearlin L.I., Mullan J.T., Zarit S.H., Whitlatch C.J. *Profiles in caregiving: The unexpected career*. Elsevier. 1995.
- [24]. Cowin L.S., Hengstberger-Sims C. New graduate nurse self-concept and retention: A longitudinal survey, *International Journal of Nursing Studies*. 2006;43(1):59-70. Available from: <https://doi.org/10.1016/j.ijnurstu.2005.03.004>
- [25]. Chandola T., Martikainen P., Bartley M., Lahelma E., Marmot M., Michikazu S., Nasermoddali A., Kagamimori S. Does conflict between home and work explain the effect of multiple roles on mental health? A comparative study of Finland, Japan, and the UK, *International Journal of Epidemiology*. 2004;33(4):884-893. Available from: <https://doi.org/10.1093/ije/dyh155>
- [26]. Orth U., Robins R.W., Meier L.L. Disentangling the effects of low self-esteem and stressful events on depression: findings from three longitudinal studies, *Journal of personality and social psychology*. 2009;97(2):307-321. Available from: <https://doi.org/10.1037/a0015645>
- [27]. Shahar G., Davidson L. Depressive symptoms erode self-esteem in severe mental illness, *Journal of Consulting and Clinical Psychology*. 2003;71(5):890-900. Available from: <https://doi.org/10.1037/0022-006X.71.5.890>
- [28]. Brown J.D., Mankowski T.A. Self-esteem, mood, and self-evaluation: Changes in mood and the way you see you. *Journal of Personality and Social Psychology*. 1993;64(3):421–430. Available from: <https://doi.org/10.1037/0022-3514.64.3.421>
- [29]. Kliever W., Sandler I.N. Locus of control and self-esteem as moderators of stressor-symptom relations in children and adolescents. *Journal of Abnormal Child Psychology*. 1992;20(4):393-413.

- [30]. Weigel C., Wertlieb D., Feldstein M. Perceptions of control, competence, and contingency as influences on the stress-behavior symptom relation in school-age children. *Journal of Personality and Social Psychology*. 1989;56(3):456.
- [31]. Kim J.H., Choi H.C. Self-esteem as a mediator between instrumentality, gender role conflict and depression in Korean middle-aged men. *Korean Journal of Woman Psychology*. 2007;12(2):145-160.
- [32]. Kim B.E., Cho Y.I., Lyu J.Y., Choi E.S., Kim H.Y. Associations between work-family conflict and self-esteem and depression of married working men. *Health and Social Welfare Review*, 2016;36(1):473-496.
- [33]. Ha Y.S., Ha M.S. The relationship between work-family conflict, self-esteem and depression on dual-income couple: Application of Actor-Partner Interdependence Model(APIM). 2021;21(6):175-190. Available from: <https://doi.org/10.22251/jlcci.2021.21.6.175>
- [34]. Act on Long-Term Care Insurance for the Aged. Article 23 Types of Long-Term Care Benefits [Internet]. Available from: <https://law.go.kr/%EB%B2%95%EB%A0%B9/%EB%85%B8%EC%9D%B8%EC%9E%A5%EA%B8%B0%EC%9A%94%EC%96%91%EB%B3%B4%ED%97%98%EB%B2%95>
- [35]. Kang C.S. A research on factors affecting elderly long-term care service satisfaction. University of Seoul. 2011.
- [36]. Lee H.Y. An Empirical study on the satisfaction of the recipients of the national long-term care insurance service for the aged : focused on the demographic characteristics of both caregivers and aged recipients, Seoul Venture University. 2011.
- [37]. Hwang C.W. A study on factors affecting service satisfaction of long-term care service users for home elderly: focusing on home elderly in Daegu metropolitan city. Yeungnam University. 2010.
- [38]. Lee H.J. Case study on the changes of caregiving burden of the primary elderycare givers with the introduction of long-term care insurance system. Wonkwang University. 2013.
- [39]. Lee K.N. The Moderating effect of resilience on the effect of caregiving burden of the elderly family caregivers using day care centers on depression. Hanseo University. 2022.
- [40]. Montgomery R.J., Stull D.E., Borgatta E.F. Measurement and the analysis of burden, Research on aging. 1985;7(1):137-152. Available from: <https://doi.org/10.1177/0164027585007001007>
- [41]. Korea Welfare Pannel Study. Questionnaire[Internet]. [Cited 2021]. Available from: <https://www.koweps.re.kr:442/data/survey/list.do>
- [42]. Rosenberg M. Rosenberg self-esteem scale (RSE). Acceptance and commitment therapy. Measures package. 1965;61. Available from: <https://integrativehealthpartners.org/downloads/ACTmeasures.pdf#page=61>
- [43]. Lawton M.P., Moss M., Hoffman C., Perkinson M. Two transitions in daughters' caregiving careers. *The Gerontologist*. 2000;40(4):437-448. Available from: <https://doi.org/10.1093/geront/40.4.437>
- [44]. Lee S.S., Jang K.S., Kim S.U., Lee B.H., Song D.Y., Park J.S., Kim E.J., Choi H.J. Low birth rate, aging population, and social conflict in 2011. Korea Institute for Health and Social Affairs. 2011.