Economic Hardship and Elderly Suicidal Ideation: with a Focus on the Double Mediating Effects of Depression and Family Relationship

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Abstract. The present research aims to identify the mediating roles of family relationship and depression in the relationship between economic hardship and suicide ideation of the Korean elderly. It was found that a partial mediating effect of depression between their economic hardship and suicide ideation existed, while no significance was obtained in the path between their economic hardship and family relationship. Based on the results, practical implications were discussed for the prevention of elderly suicide.

Keywords: elderly suicidal ideation, economic hardship, depression, family relationship

1 Introduction

According to the report of OECD [1], the suicide rate of the Korean elderly marked 33.3 per every 10,000 in 2011, which is almost triple of the average of 12.4 of all the OECD countries. This figure is clearly indicative of the seriousness of the issue for Korean society. Various factors might influence suicidal ideation among the elderly, but it is generally agreed that economic reason is one of the most important mechanism leading to elderly suicidal ideation. According to the report of Korean Ministry of Health and Welfare [2], economic hardship accounted 40.4% of the reasons for suicide ideation. However, a clear limitation of these preceding researches on the relationship between economic hardship and suicide ideation is that they failed to identify a variety of contexts existing between the two factors.

In recent researches have agreed that elderly suicide ideation result from combined interaction between a variety of social and psychological factors, and centered on the analysis of paths to suicide ideation. A great portion of such path analyses have paid attention to depression as the crucial cause of suicide ideation. Some previous researches also reported that a set of cause variables influence their suicide ideation via the path of depression [3], [4]. Jung and Roh [5] also found that depression exerts
a mediator effect on the relationship between the economic status and suicide ideation of the elderly. However, these research models dispense with the support system, which is an important protection factor, and thus would not really help arrange preventive interventions in the field of practice. Considering that the most powerful support system in Korean society is family relationship [2], it might be concluded that further researches on the relationship between economic hardship and suicide ideation should address the issue of the double mediating effects of family relationship and depression.

The present research, thus, aims to identify the dual mediating effects of family relationship and depression on the relationship between economic hardship and suicide ideation of the elderly. The results of the analysis are expected to provide essential data to identify accurate intervention time and also to prepare for a set of practical and preventive policies.

2 Research Method

The main purpose of the present research was to identify double mediating effects of family relationship and depression in the relationship between economic hardship and suicide ideation of the elderly. A total of 534 surveys were analyzed and the statistical programs of SPSS (PASW, ver 17.0 and Amos 18.0) were used to examine the research model. And Sobel-test was employed to verify the statistical significance of the mediating effect.

The measurement tools used for the current research are as follows. The item of economic hardship, based on Mirowsky and Ross [5]' definition, was paraphrased as the question ‘Do you think you have insufficient money to pay for the food, clothes, housing and medical services that you need?’ The item of suicide ideation was measured by Oh [6]'s translated version of Beck et al [7]'s SSI (Scale for Suicidal Ideation). The Cronbach's alpha of the scale was obtained at .873. The item of depression was measured by Kee's [8] GDSSF-K (Geriatric Depression Scale Short Form Korea Version), which is a standardized version of GDS (Geriatric Depression Scale) developed by Yesavage et al [9]. The Cronbach's alpha of the scale was found at .88. The item of family relationship was measured by Yang and Lee’s [10] ‘The Family Relationship Scale’. The Cronbach's alpha was obtained at .949.

3 Results

The socio-demographic characteristics of the research subjects are summarized in Table 1. 331 subjects (62.0%) were women and 203 men (38.0%). Approximately half of the subjects, 265(49.6%), were in their 70's followed by 184 older than 80(34.5%) and 85 in the 60's (15.9%). As for their education level, 229(42.9%) had only elementary education, 217(40.6%) with no schooling, 45(8.4%) with high school and 7(1.3%) with post-secondary education. In terms of marital status, more than a half, 289(54.1%), were bereaved, 221(41.4%) married, 12(2.2%) cohabiting, 8(1.5%) divorced, and 4(0.7%) separated.
Table 1. Socio-Demographic Characteristics.

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<th>Categories</th>
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<tbody>
<tr>
<td>Gender</td>
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<tr>
<td>male</td>
<td>203 (38.0%)</td>
<td>Age</td>
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<td>female</td>
<td>331 (62.0%)</td>
<td>60's</td>
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<tr>
<td></td>
<td></td>
<td>70's</td>
<td>265 (49.6%)</td>
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<tr>
<td></td>
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<td>80 or older</td>
<td>184 (34.5%)</td>
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<td>Education</td>
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<td>Marital</td>
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<tr>
<td>no ed</td>
<td>217 (40.6%)</td>
<td>married</td>
<td>221 (41.4%)</td>
</tr>
<tr>
<td>elementary</td>
<td>229 (42.9%)</td>
<td>bereaved</td>
<td>289 (54.1%)</td>
</tr>
<tr>
<td>middle</td>
<td>36 (6.7%)</td>
<td>divorced</td>
<td>8 (1.5%)</td>
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<tr>
<td>high school</td>
<td>45 (8.4%)</td>
<td>separated</td>
<td>4 (0.7%)</td>
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<tr>
<td>college</td>
<td>7 (1.3%)</td>
<td>cohabiting</td>
<td>12 (2.2%)</td>
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The goodness-of-fit index of the research model was, as shown in Figure 1, as follows: Chi-Square = 129.084 (df=25) p=.000, TLI=.908, CFI=.949, SRMR=.046, RMSEA=.088. With the assumption that these figures satisfied Kline's [11] criterion for the goodness-of-fit, we performed analysis of the measured data. First, it was found that economic hardship exerted a direct influence on depression (path coefficient = .576, p<0.001) and suicide ideation (path coefficient = .282, p<0.001), but not on family relationship. It was also found that family relationship had a direct impact on depression (path coefficient = -.433, p<0.001), and suicide ideation (-.322, p<0.001), while depression had a significant influence on suicide ideation (path coefficient = -.433, p<0.001).

Therefore, the double mediating effects of family relationship and depression were not found in the relationship between economic hardship and suicide ideation. It was only found that there was a mediating effect in the path of economic hardship → depression → suicide ideation. In particular, the mediating effect of this path was examined by Sobel-test: economic hardship > depression (nonstandardized coefficient = .149, standard error = .039) > suicide ideation (nonstandardized coefficient = .558, standard error = .081). The Sobel-test statistics was obtained at 3.691, whereas the Two-tailed probability = 0.000. Thus, the mediator effect of depression in the relationship between economic hardship and suicide ideation was found significant. In other words, the recognized level of economic hardship by the elderly might lead to higher suicide ideation, which was mediated by their sense of depression.
Fig. 1. The double mediator model for family relationship and depression in the relationship between economic hardship and suicide ideation

4 Conclusions

On the basis of the results, the following implications can be proposed. Above all, it was found that economic hardship had a significant influence on suicide ideation in the elderly. More systematic intervention under the government should be installed in order to secure their financial status beyond the basic public pension for the elderly. Second, it was found that depression exerted a mediating effect on the relationship between economic hardship and suicide ideation. It might be assumed that economic hardship in the elderly would enhance negative self-appraisals and, as a consequence, aggravate the extent of suicide ideation. Thus, clinical programs to provide psychological and emotional support should be developed to deal with the elderly facing economic hardship.

It was also found, in turn, that there was no significant correlation between economic hardship and family relationship. This might be understandable, considering Korean culture in family. Lee and Lee [12] found that the level of satisfaction with life of the elderly depend more on emotional connectedness with their children than on their economic level. That is, the emotional aspect rather than the economic aspect plays a more important role in the relationship between the elderly and other members of the family. However, further researches are necessary to investigate the correlation between economic hardship and family relationship.

References