Study on the role of grit in Korean elderly suicide ideation

Yun-Jeong Kim

1 Dept. of Elderly Welfare, Hanseo University
46, Hanseo 1-ro, Haemi-myun, Seosan-si, Korea

Abstract. This study aims to understand the role of grit in Korean elderly suicide ideation. The subjects of this study are male and female elderly over 65 living in a local community. Main result is that if they had low grit when they had high depression, their suicidal ideation was high, but if they had high grit, their suicidal ideation significantly decreased.

Keywords: Depression, suicidal ideation, grit, mediation effect, moderating effect

1 Introduction

While a number of studies interested in risk factors of suicide have been published, some were interested in revealing moderating factors or resilience factors reducing suicidal ideation on the other hand. They are interested in risk factors of suicide and protective factors of suicide, separately like this because these two factors are of different dimensions [1]. In other words, risk factors of suicide and moderating factors are interrelated, but not interchangeable. This concept emphasizes that the risk factors of suicide and moderating factors of suicide should be divided [2] and the factors on these two dimensions should be considered individually. Thus, this study, too, attempts to focus on ‘depression’ as a risk factor of suicidal ideation and ‘grit,’ which has not been studied in Korea, as mediating/moderating factor and verify if grit has a mediating/moderating effect in the relationship between depression and suicidal ideation.

Grit is a concept developed by a series of researchers who are interested in what human abilities predict a successful life [3] and look for variables other than intelligence [3-6]. To understand the role of grit in suicidal ideation, what motivation theory argues should be considered. In other words, according to the motivation theory of Brehm and Self [7], an effort is a function of two factors, the importance of success and the difficulty of goal attainment. The importance of success is defined as how much effort one can make while the difficulty in goal attainment is defined as a practical effort. Thus, those with high grit are people who make an unremitting effort to overcome the difficulty and achieve a goal, who can be said to have high willingness to overcome frustration and obstacles with persistence in order to achieve the goal [2]. Especially, grit is an effort and passion to overcome a failure, adversity...
and situation in which it is difficult to expect growth [3] and it is predictable that it will act as volition to overcome suicidal ideation when one is in an extreme difficulty in his or her life.

Summing up these theoretical arguments, this study aims to understand the mediating effects and regulatory effects of grit in the impacts of depression in the Korean elderly on their suicidal ideation. Research questions include: first, in the impacts of depression in the Korean elderly on suicidal ideation, does grit play a moderating role? Second, in the impacts of depression in the Korean elderly on their suicidal ideation, does grit play a moderating role?

2 Method

The subjects of this study are male and female elderly over 65 living in a local community. Finally, data of 315 persons were used in the main analysis. Depression was measured with 10 questions of SCL-90 (Derogatis, 1977) translated by Choi (1992). The four-point Likert scale was converted to a five-point Likert scale for the measurement. Cronbach’s alpha value was .877.

For suicidal ideation, a five-point Suicidal ideation Scale adopted by Kim (2002), which was developed by Harlow et al. (2001) was used. Cronbach’s alpha value was .906.

For grit, a five-point Likert scale (1=Not at all similar to me, 5= Very similar to me) consisting of 12 questions adopted by Kim & Lee (2015) was used, which was developed by Duckworth, Peterson, Matthews, & Kelly (2007), in which the higher the score, the higher their grit becomes. The Cronbach’s alpha value of reliability was .779.

3 Result

3.1 The mediating effect of grit in relationship between depression and suicidal ideation

To verify the mediating effects of grit in the relationship between depression and suicidal ideation in the Korean elderly, 3-step multiple regression analysis (independent -> parameter, independent -> dependent, independent, parameter -> dependent) proposed by Baron & Kenny (1998) was used. Also, in order to verify the significance level of the indirect effects of the independent variables on the dependent variables through parameters, Sobel’s (Sobel, 1982) Test was used.

In Step 1, depression had a significant effect on grit and in Step 2, it had a significant effect on suicidal ideation. Lastly, in Step 3, depression and grit had significant effects on suicidal ideation and standardized coefficient of depression, β value
decreased from .547 to .505. In other words, as grit was input, the impact of
depression on suicidal ideation decreased. Accordingly, in the relationship between
depression and suicidal ideation in the Korean elderly, it was verified that grit had a
partial mediating effect. As a result of verification of the significance level of the
indirect effect of independent variables on parameters, Z value in the Sobel’s test was
significant, so its mediating effects were verified.

3.2 The moderating effect of grit in relationship between depression and
suicidal ideation of the Korean elderly

To verify the moderating effects of grit in the relationship between depression and
suicidal ideation in the Korean elderly, the analytical method proposed by Ailkan &
West (1991) was used. They proposed the moderating effects using a regression
analysis and also, they proposed to input all independent variable, moderating
variables and independent variable \times\ moderating variables to the regression model
as independent variables.

It turned out that depression and grit interacted with each other and had significant
effects on suicidal ideation. In other words, it was found that grit regulated the impact
doing depression on suicidal ideation. In [Fig. 2], when people have low depression, there
is almost no difference in suicidal ideation according to their grit. However, if they
have low grit when they have high depression, their suicidal ideation is 4.314 points,
but if they have high grit, their suicidal ideation decreases to 1.294. Thus, the
moderating effect of grit on the impact of depression on suicidal ideation in the
Korean elderly was verified.

4 Discussion

Main result are as follows

First, it was found that grit had a partial mediating effect on the impact of
depression in the Korean elderly on suicidal ideation. It is interpreted that the higher
their depression, the higher their suicidal ideation becomes, but it turns out that this
phenomenon becomes lower as their grit becomes higher, so their grit decreases
impact of their depression increasing their suicidal ideation.

Second, the moderating effect of grit on the impact of depression in the Korean
elderly on their suicidal ideation was verified.

References

together? Mediators, moderators, and independent, overlapping, and proxy risk factors.