2023 Doctoral Dissertation (Abstract)

Development and Application of a Gratitude Scale for Older Adults:
Examining the Effects on Loneliness

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Introduction

Gratitude is one of the factors that promotes well-being and has been the subject of an increasing number of studies since the mid-2000s. Gratitude has been shown to enhance well-being primarily in young people. The same is true for older people, but the number of studies on this topic is small and almost nonexistent in Japan. Therefore, with a focus on the measurement of gratitude among older people and its relationship with loneliness, the present study aimed to develop a scale to measure gratitude, examine its direct effect on loneliness in older adults, and clarify whether it can moderate the effects of small social networks and reduce loneliness.

Study 1: Qualitative Study on the Components of Gratitude in Older Adults

To clarify the components of gratitude in older adults, we conducted semi-structured interviews with 20 older adults (mean age, 76.3 ± 6.4 years). The results revealed three components of gratitude: "experiences of realizing value", "external and internal positive feelings", and "returning favors to others". Gratitude among older adults was found to encompass realizing the value of what they have, positive feelings, and returning favors to others, as well as passing on various things they have gained in their lives to the next generation.

These components correspond to the basic elements of gratitude, including cognition, emotion, and behavior, and are believed to emerge owing to the influence of the characteristics of old age. Moreover, gratitude appears to be influenced by psychosocial development, including altruistic tendencies and generational characteristics.

Study 2: Development of a Gratitude Scale for Older Adults

2-1 Reliability and Validity of the Gratitude Scale for Older Adults

We performed a subsequent study to develop a gratitude scale for older adults based on the structure of gratitude identified in Study 1.

We conducted a preliminary questionnaire survey consisting of 50 items based on the three factors identified in Study 1. After evaluating content validity and performing item analysis, these 50 items were narrowed down to 21.

Confirmatory factor analysis was performed on 225 participants (mean age, 78.4 ± 6.3 years) from a senior club in Tokyo using a 21-item, three-factor model. However, the hypotheses were not supported. Consequently, the items underwent revision, leading to an exploratory factor analysis that revealed the following three new factors: "desire to return favors", "receiving something of value", and "benefits gained through hardship". However, two items included the same terminology ("benefits

gained through hardship"). Additionally, a comparable item from "benefits gained through hardship" was included in "receiving something of value". Therefore, we considered that "benefits gained through hardship" may have been extracted based on the item wording, which raised doubts about the three-factor model.

Consequently, we conducted a validity comparison of the three-factor model and a two-factor model that excluded "benefits gained through hardship".

The two-factor model was deemed suitable for measuring gratitude in older adults (α = .92, goodness of fit index [GFI] = .923, adjusted goodness of fit index [AGFI] = .886, comparative fit index [CFI] = .955, root mean square error of approximation [RMSEA] = .076).

2-2 Revalidation of the Validity of Gratitude Scale for Older Adults

The purpose of this study was to test whether the validity of the scale developed in Study 2-1 could be replicated in other samples.

We conducted an online survey on 200 older adults (mean age, 78.0 ± 5.0 years) registered with a research firm. The survey encompassed inquiries regarding the scale developed in Study 2-1 and a trait gratitude scale.

Confirmatory factor analysis with error correlations for items with a high modified index (18.532) yielded a GFI of .901, AGFI of .852, CFI of .957, and RMSEA of .09. The correlation coefficient with the trait gratitude was significantly high (r = .71, p < .01). Therefore, both the construct and concurrent validity of this scale were confirmed.

Study 3: Examining the Effects of Gratitude on Loneliness in Older Adults

The purpose of this study was to utilize the scale developed in Study 2 to examine the direct effects of gratitude on loneliness in older adults as well as whether gratitude could moderate the influence of small social networks on loneliness.

The study participants were the same as those in Study 2-2. The survey encompassed inquiries regarding demographic information, medical history, subjective health, the gratitude scale for older adults, activities of daily living, feelings of loneliness, and social networks.

Hierarchical multiple regression analysis revealed that loneliness had a significant negative association with gratitude (β = .212, p < .001), even after controlling for confounding variables in step 1. The analysis in step 2 input an interaction term between gratitude and social networks as independent variables, but the result was not significant (β = .109, n.s.).

General Discussion

The first and second studies allowed us to extend our understanding of gratitude within the context of old age and provided a means of measurement. While the buffering effect of gratitude could not be conclusively demonstrated, the observed influence of gratitude on loneliness that goes beyond the emotional realm represented a significant discovery. A limitation of these studies finding is in the inherent sample bias, as many participants in the study were active and had high cognitive ability.

However, the fact that psychosocial development was reflected in the gratitude of older adults offers a foundational framework for further exploration and assessments of gratitude among older adults in various situations. Moreover, the findings from the third study suggest that cultivating gratitude from multiple aspects is effective for reducing loneliness.