Development of Gerotranscendence Scale Type2 Japanese Version

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1. Purposes
Erikson & Erikson (1997) regarded gerotranscendence as a critical psychosocial task among the oldest old. Gerotranscendence can be defined as (1) an increasing feeling of cosmic communication with the spirit of universe, (2) a redefinition of the perception of time, space, life and death, and (3) a decrease in interests in superfluous social interaction and self-centeredness (Tornstam, 2005). To measure this construct, Tornstam (1997) developed the Gerotranscendence Scale Type2, which was derived from an earlier measure, the Gerotranscendence Scale Type1, and qualitative studies. In a factor analysis of the new Type2 scale, Tornstam reported three factors: (1) The Cosmic Dimension, (2) The Coherence Dimension and (3) The Solitude Dimension. Cronbach’s coefficients were (1)=.73, (2)=.60, and (3)=.57. Ishikawa & Osada (2008), however, was unable to confirm this factor structure using a Japanese sample. The purposes of this study are (1) to examine the psychometric properties of the Gerotranscendence Scale Type2 Japanese Version (GST2J) and (2) to clarify differences with the original Swedish version may be due to culture.

2. Methods
1) Participants
1,135 older adults received our questionnaire in Aichi, Shizuoka, and Gifu Prefecture. 590 older adults returned their answered scales by mail, however, we didn't include questionnaires from 65 older adults, because they had missing answer items such as sex, age, and so on. The final sample consisted of 525 older adults (Male=260, Female=265). The mean age of the sample was 69.28 years old (SD=4.77, Range=60-94years old).

2) Translation of the Gerotranscendence Scale Type2
A Japanese Swedish Language Researcher made the translation of the Swedish Gerotranscendence Scale Type2 and back translation. Tornstam reviewed the back translation, confirming the translation was valid and conveyed constructs in an appropriate way in Japanese, and gave us his permission as the Japanese Version.

3) Scales
Participants completed the GST2J, as well as measures to test its convergent validity including: Erikson’s Psychological Stage Inventory, and the Life Satisfaction Index A. We included other scales regarding quality of life, however this study didn’t focus on them.

3. Results and Discussions
1)Principle Component Factor Analysis
As a result of a principle component factor analysis (varimax rotation) of GST2J three factors were found as Tornstam had reported (1997). However, item1 “Being at peace and philosophizing by myself is important for my well-being had relatively high factor loadings on two factors (Factor1=.400, Factor2=.324), and was deleted. Following Tornstam (1997), the first factor was named “The Cosmic Dimension,” the second was “The Coherence Dimension,” and the third was “The Solitude Dimension.” Each correlation between the three subscales and the total scale was significant. The result was certified to have more appropriate conformity using a confirmatory factor analysis (GFI=.94, AGFI=.89, CFI=.89).

2)Reliability
To determine the reliability Cronbach’s coefficients were computed (Factor1=.75, Factor2=.59, Factor3=.61), which were similar to results reported by Tornstam(2005).

3)Validity
Correlations among GST2J, LSI-A and EPSI were examined. The GST2J was significantly associated with the total scale of LSI-A and EPSI, and so construct validity was established.

4. Conclusions
Regarding international comparisons of caregiving, Zarit (2009) suggested clinical psychologists should have a solid foundation of promising and empirically validated approaches, and address relevant factors from the perspectives of culture and family background. In our results, the Gerotranscendence Scale appeared to measure similar constructs in Japan as in the original Swedish version, with only one minor change, omission of item1.

5. References

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