



# Validity and Reliability of the Korean Versions of the Duke University Religion Index (K-DUREL) and the Daily Spiritual Experience Scale (K-DSES)

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## Background

- Religion and spirituality have an influence on health, and it is emphasized within the context of the holistic paradigm and health care.
- Healthcare professionals should provide spiritual intervention as an essential part of caring for human health.
- However, the ability to measure the effectiveness of religious and spiritual interventions is hampered due to the abstract nature of the concept.
- One way to do this is by measuring the impact of religious activities and daily spiritual experiences on mental health to reveal and develop a deeper understanding of the mechanisms promoting mental health.

## Purpose

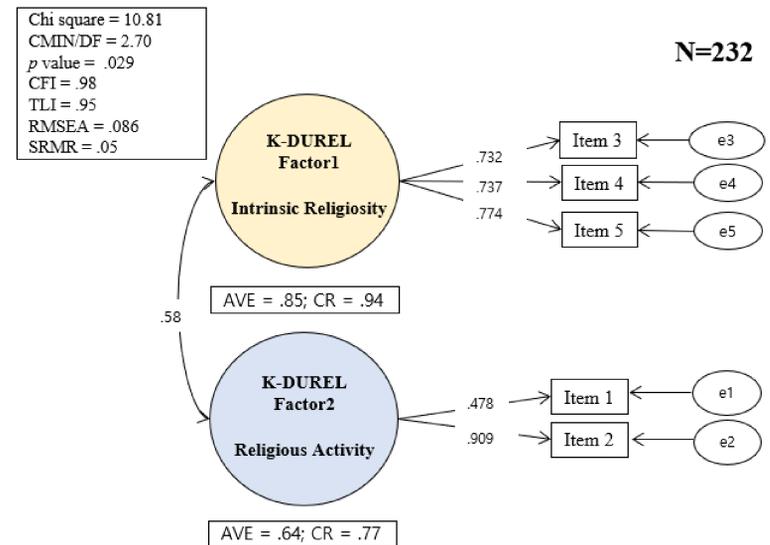
The purpose of this study was to translate Duke University Religion Index (DUREL) and the Daily Spiritual Experience Scale (DSES) into Korean and test the validity and reliability of the instruments.

## Method

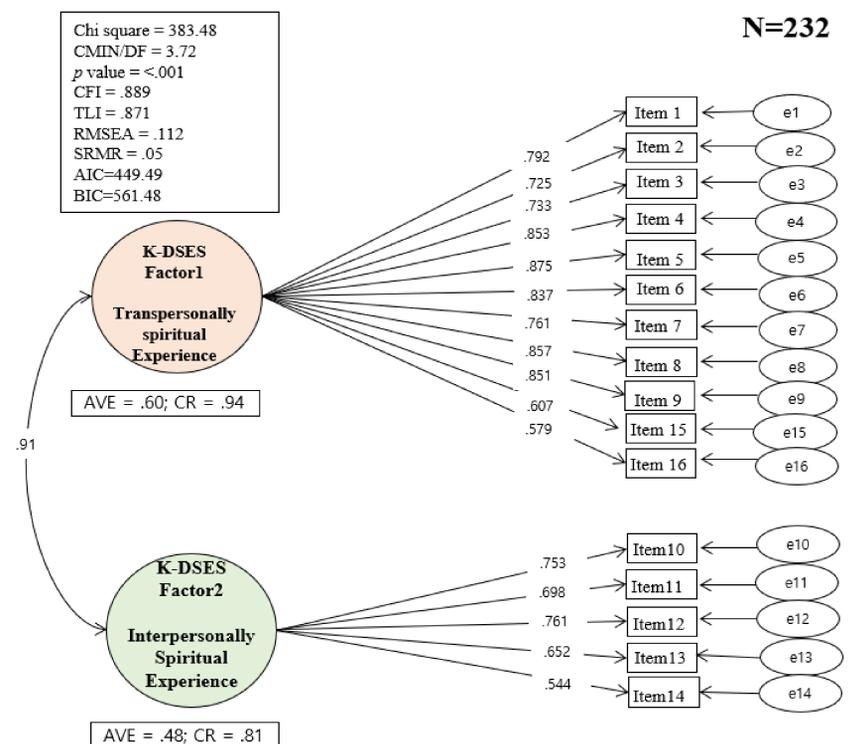
- Korean version of DUREL and DSES were translated and back-translated by 6 bilingual experts and group discussions.
- Both exploratory and confirmatory factor analyses were conducted with two data sets of secondary analysis study to examine the factor structure and construct validity.
  - Data 1 is used EFA (N=385)
  - Data 2 is used CFA (N=232)
- Correlations with other variables were used to test validity and reliability.
- Data analyses were performed using SPSS 26.0 and AMOS 22.0

## Result

- For K-DUREL, the final evaluation yielded **two factors with 5 items**: intrinsic religiosity (3 items) and institutional religious activity (2 items) (**Figure A**).
- K-DSES had **two factors with 16 items**: transpersonal spiritual experience (11 items), and interpersonal & environmental spiritual experience (5 items) (**Figure B**).
- K-DUREL and K-DSES were significantly **positively correlated with spirituality, and life satisfaction**, and had a **negative correlation with depression** (**Table 1**).
- Cronbach's alpha of K-DUREL and K-DSES were .67 and .96, respectively.



<Figure A> Path diagram of the K-DUREL's two-factor model



<Figure B> Path diagram of the K-DSES's two-factor model

Variable	Spirituality r(p)	Depression r(p)	Life satisfaction r(p)
<b>K-DUREL</b>	.66 (<.001)	-.14 (.032)	.24 (<.001)
Intrinsic religiosity	.61 (<.001)	-.19 (.004)	.24 (<.001)
Religious activity	.51 (<.001)	-.04 (.538)	.18 (.007)
<b>K-DSES</b>	.69 (<.001)	-.24 (<.001)	.31 (<.001)
Transpersonal spiritual experience	.69 (<.001)	-.23 (<.001)	.27 (<.001)
Interpersonally spiritual experience	.58 (<.001)	-.24 (<.001)	.37 (<.001)

<Table 1>. Correlations of the Subscales of K-DUREL, K-DSES with Other Variables

## Conclusion

- Applying K-DUREL and K-DSES in theory-based research may contribute to knowledge about the religious activity and spiritual experiences in the health and well-being of a Korean.
- Both instruments showed good reliability and validity for the translated Korean versions.
- Two instruments have the potential to measure changes in religion and spirituality after spiritual or holistic nursing interventions.