

## Psychometric Properties of the Beck Anxiety Inventory Among Adult Population in Korea

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**Abstract:** *We investigated the psychometric properties of the Beck Anxiety Inventory in large, nonclinical Korean adult population.*

**Background:** Anxiety is a widespread condition. Given the considerable toll taken by the disorder on public health and on the individual functioning, psychometrically sound screening methods are critical for theory and research on. Among one of the most widely used anxiety measures, the Beck Anxiety Inventory (BAI) has strong advantage in that its reliability and validity has been well verified. Also, its brevity and simplicity render it suitable for a range of research paradigms, and add its clinical value. If the BAI has real strength than other anxiety measures, it is increasingly to be used in non-clinical as well as clinical research as a brief and effective screening tool. The aim of this study is to evaluate (1) reliability and validity of the Korean version of the BAI, and (2) factorial structure suggested by previous studies in large, normal adult Korean populations.

**Method:** We conducted a cross-sectional survey using a stratified sample of 1022 community-dwelling people aged 19 and over. We investigated the internal consistency, test-retest reliability, and Pearson correlations

with the other self-report measures: Spielberger State-Trait Anxiety Inventory (STAI), Adult ADHD Self-Report Scale (ASRS). The analyses were done with the SPSS ver. 21. We also applied a series of confirmatory factor analyses to determine the internal structure of the BAI. All hypothesized models were examined using the mean and variance-adjusted weighted least squares estimation (WLSMV) implemented in Mplus 6.1.

**Results:** The Cronbach's alpha for the Korean BAI total score was .91. The correlations between items of the BAI ranged from .18 to .64. The test-retest correlation for an average time lapse of 7.2 days was .84. The BAI and the STAI were significantly correlated with each other. Among the reported factorial structure, the five factor model showed the best overall fit.(subjective fear, somatic nervousness, neurophysiological, muscular/motoric, respiration factor). Among the other studied factor structure, the four-factor model showed favorable fit indices(subjective, autonomic, neurophysiological, and panic factors).

**Discussions:** This study revealed that the Korean version of Beck Anxiety Inventory showed favorable psychometric properties. This implies that the BAI can

be used as a reliable anxiety measuring tool in nonclinical adult population in Korea. Also, among the reported factorial structure, the five factor model showed best overall fit.

**Limitations and future work:** This study does have a number of limitations, many of which could be clarified by future work. First, we should be cautious about generalizing this findings to clinical populations because we only used non-clinic adults. This findings should be replicated with various patients groups especially in anxiety disorder sample. Second, only self-report measures were used, so relationships between study variables may have been inflated by questionnaire-specific method variance.

## References

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