

# The Core Assumptions Scale (CAS): Psychometric Evaluation and Its Associations with Trauma and Posttraumatic Stress Symptoms

Yi-Jen Su<sup>1,2</sup> and Sue-Huei Chen<sup>1,3</sup>

<sup>1</sup>Department of Psychology, National Taiwan University

<sup>2</sup> Center for the Treatment and Study of Anxiety, School of Medicine, University of Pennsylvania

<sup>3</sup> Department of Psychology, Emory University

Janoff-Bulman's (1992) shattered assumptions theory proposes that people possess three kinds of fundamental assumptions, specifically that the world is benevolent, the world is meaningful, and the self is worthy. According to the theory severe trauma shatters and challenges these assumptions, resulting in posttraumatic adaptation difficulties. Janoff-Bulman's World Assumption Scale (WAS) is by far the most widely used measure for assessing these fundamental assumptions (Janoff-Bulman, 1989). However, its psychometric properties have been challenged by recent studies. Recently several measures assessing similar constructs have been developed, but their limitations also have been noted. Accordingly, based on the shattered assumptions theory and the literature on trauma-related cognition, the present study, using two sub-studies, aimed to develop a new, theory-reflective, and more applicable measure, the Core Assumptions Scale (CAS), to assess hypothesized fundamental assumptions. In Study 1, we developed the item pool of the CAS and administered it to 156 college students (69.9% female). Through item analysis and exploratory factor analysis, we arrived at our 15-item CAS, comprised of four subscales: safe world, just world, controllable world, and self-worth. In Study 2, a prospective study, the psychometric properties of the CAS were evaluated in 809 college students (60.2% female), who were followed up 2 months later. Confirmatory factor analyses showed that the overall fit of our four-factor model was superior to that of other proposed factor-models, with related indices reaching acceptable levels. Therefore, we used this model for further psychometric examination. In these investigations the CAS showed good internal consistency and adequate 8 ~ 10 weeks test-retest reliability. Moderate inter-subscale correlations suggested that the fundamental assumptions assessed by the CAS were significantly associated with each other. Concurrent and predictive validity were adequate. The CAS total was able to significantly predict subsequent depressive severity, and its explained variance was superior to that of the WAS total. Significant differences were noted among different trauma groups on the CAS total and its subscale scores, with the assaultive violence group scoring the lowest. Moreover, the PTSD group scored lower on the CAS total and subscales than the no-PTSD trauma group and the no-trauma group. Taken together, these findings suggest that the CAS is a psychometrically sound measure of fundamental assumptions, making it suitable for investigating trauma survivors and people with PTSD.

**Keywords:** *fundamental assumptions, posttraumatic stress disorder, scale, shattered assumption theory, trauma-related cognitions*