SUPPLEMENTARY MATERIAL

The multifaceted self-related psychological variables

Resilience was measured using the Connor-Davidson Resilience Scale (CD-RISC), which is a 25-item self-report. CD-RISC measures the capacity to cope with internal and external stressors.[1] Each item is scored using a 5-point scale [from 0 (not true at all) to 4 (true nearly all the time)], and higher total scores reflect greater resilience. In the present study, the internal consistency (Cronbach's α) of the total resilience score was 0.93.

Self-perception was assessed using the Self-Perception Scale,[2] which measures the belief pattern concerning the perception of individuals of themselves. The Self-Perception Scale is composed of 30 personality trait adjectives. These adjectives were selected from the 400 personality adjectives, which are listed in the analysis of Korean personality trait adjectives[3] based on two criteria, imagery and likableness. Of the adjectives, 25 were positive traits and the remaining five were negative. Adjectives were evaluated for self-relevance (Does this adjective describe you?). Each item was scored from 0 (not at all) to 4 (definitely yes) and the negative trait items were reversely scored. Therefore, a high total score related to positive self-perception. The Self-Perception Scale has been found to have good reliability and validity[2] and is widely used in Korean psychiatric and psychological research.[4,5] Cronbach's α for the total self-perception score was 0.91 in the present study.

Rosenberg's Self-Esteem Scale (RSE)[6] is a self-report questionnaire used to measure an individual's evaluation of self-worth. The RSE consists of 10 items such as 'I feel that I have a number of good qualities' or 'at times, I think I am no good at all' ranged from 1 ("strongly disagree") to 4 ("strongly agree"). This scale has been used in various populations, and the internal consistency was 0.90 in the present study.

Features of schizotypy were assessed using Chapman's true-false self-report questionnaires for physical[7] and social anhedonia,[8] magical ideation,[9] and perceptual aberration.[10] The scale for physical anhedonia contains 61 items assessing deficits in experiencing pleasure from physical, sensory, and esthetic stimuli.[11] The Social Anhedonia Scale consists of 40 items to evaluate deficits in experiencing pleasure from nonphysical stimuli such as asociality and indifference.[12] The Magical Ideation Scale includes 30 items measuring beliefs in implausible or invalid forms of causation.[13] The Perceptual Aberration Scale is composed of 25 items that assess perceptual distortion and bodily image.[14] The internal consistencies of these scales in this study were 0.92, 0.93, 0.84, and 0.90, respectively.

To measure the basic symptoms, the Frankfurt Complaint Questionnaire (FCQ)[15] was used. The FCQ was developed by Süllwold[15] based on the complaints of schizophrenia patients and has been widely used for evaluating subjective symptoms. The FCQ contains 98 yes-no questions, which are grouped into 10 subscales: loss of control, simple perception, complex perception, language, thought, memory, motility, lack of automatism, anhedonia, and sensorial overstimulation. The Cronbach's α for the total FCQ score was 0.99 in the current study.

Other clinical measures

Self-directedness (SD) and self-transcendence (ST), which are the dimensions in the character section of the Temperament and Character Inventory (TCI) were chosen because of their distinct relationships with the awareness and experience of the self as previous studies have stated.[16,17] SD reflects one's ability to regulate behaviors to meet chosen goals and values,[16] and low values in SD were observed in schizophrenia patients.[17] Increased ST, which indicates a tendency towards magical thinking, unity of the self with the universe, and high patience with uncertainty, was characterized in schizophrenia.[17] These different alterations of SD and ST in schizophrenia patients point out their disparate associations with two levels of the self.[16] Self-directedness and self-transcendence were assessed using the Korean versions of TCI Revised Short[18-20] for adults (age>19 years) and Junior TCI 12−18[18] for middle and high school students. Intelligence quotient, which is a score derived from a set of standardized test of cognitive intelligence, was assessed using the Korean-Wechsler Adult Intelligence Scale.[21,22]

Association between AIHQ and the three factors in UHR individuals

Preliminary Pearson's correlation analysis results are outlined in Supplementary Table 1.

Supplementary Table 1. Correlations between AIHQ scores and the three factors in UHR individuals

	Reflective self factor	Pre-reflective self factor	Neurocognition factor
Hostility perception bias	-0.32 (0.022)	0.16 (0.246)	0.17 (0.235)
Composite blame bias	-0.37 (0.006)	0.27 (0.05)	0.19 (0.181)
Aggressive response bias	-0.01 (0.922)	0.119 (0.399)	0.22 (0.121)

Due to the number of correlations, a corrected probability level was set a priori at 0.006 (i.e., 0.05/9), and correlations falling above that level were considered to be non-significant. AIHQ: Ambiguous Intentions Hostility Questionnaire, UHR: ultra-high risk

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