Psychometric Properties of the Illness Attitudes Scale among People with Substance Use Disorders

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INTRODUCTION

- Health anxiety is the excessive concern and worry about one's health (Tyrer & Tyrer, 2018), severe forms of which are observed in 17.5% to 24.7% of medical patients (Tyrer et al., 2011).
- Health anxiety is related to increased substance use (Illiceto et al., 2010; Jeffers et al., 2015; Murphy et al., 2001), depression (Salkovskis et al., 2002), hostility (Weck et al., 2011), and emergency department visits (Fergus et al., 2015). Therefore, it is important to consider among people receiving treatment for a substance use disorder (SUD).
- People receiving treatment for a SUD often report that their physical and mental health are top motivators for them to seek treatment (Grosso et al., 2013; Pollini et al., 2006), highlighting the need for a psychometrically sound measure of health anxiety in this population.
- The Illness Attitudes Scale (IAS) is one tool for detecting health anxiety that is valid and reliable, but its psychometric properties among people with a SUD are unclear (Fergus & Valentiner, 2009; Fergus et al., 2015; Sirri et al., 2008).
- The aim of this study is to determine whether the IAS can serve as a diagnostic tool for severe health anxiety among people receiving treatment for a SUD.

METHODS

Participants

- The sample consisted of individuals in residential substance use treatment in Mississippi who completed the IAS upon intake (n = 103).

Measures

- The IAS is a 29-item measure that assesses for the presence of hypochondriasis and health anxiety. 25 of the 29 questions are on a Likert scale, including "0 = "no," 1 = "rarely," 2 = "sometimes," 3 = "often," and 4 = "most of the time."
- The cutoff score indicating health anxiety is 47 out of 108 (Hedman et al., 2015).

Analysis Plan

- An exploratory factor analysis (EFA), using principal axis factoring and oblique rotation, was used to understand the amount of shared variance between IAS items. Factor structures with 2, 3, 4, 5, and 6 factors were examined. Bivariate correlations between the IAS total score and measures representing convergent (Anxiety Sensitivity Index, ASI) and discriminant (Comprehensive Effects of Alcohol Questionnaire, CEOA) validity were also examined.

SAMPLE IAS ITEMS

IAS1: "Do you worry about your health?"
IAS2: "Are you worried that you may get a serious illness in the future?"
IAS3: "Does the thought of a serious illness scare you?"
IAS6: "If pain lasts for a week or more, do you believe you have a serious illness?"
IAS11: "When your doctor tells you that you have no physical disease, do you refuse to believe him/her?"
IAS 14: "Does the thought of death scare you?"
IAS19: "When you read or hear about an illness, do you get symptoms similar to those of the illness?"

RESULTS

Table 1: Communalities Table.

Item	Communality Summary Loadings
IAS1	.643
IAS2	.608
IAS3	.710
IAS4	.657
IAS5	.427
IAS6	.640
IAS7	.419
IAS8	.411
IAS9	.366
IAS10	.566
IAS11	.401
IAS12	.470
IAS13	.554
IAS14	.687
IAS15	.520
IAS15b	.369
IAS16	.555
IAS17	.518
IAS18	.623
IAS19	.515
IAS20	.489
IAS21	.560
IAS22	.370
IAS23	.538
IAS24	.431

- Participants' average age was 41.2 (SD = 9.3), a majority identified as male (76.3%), 61.9% identified as Black/African American, and their primary drug of choice was crack/cocaine (48%).
- The average IAS score was 59.7 (SD = 15.54) and it exhibited high internal consistency (α = .88).
- Examination of the eigenvalues and scree plot suggested extracting a 3 or 6 factor solution, but both factor solutions had numerous cross-loadings and lack of distinct factors (i.e., strong loadings of .4 or higher).
- Almost every item shared over 40% of the variance with other items (loadings of >.4; *Table 1*).
- Total IAS scores were associated with total scores on the ASI (r = .59, $p < .001$), but unrelated to total scores on the CEOA (r = -.03, $p = .77$).

CONCLUSIONS & IMPLICATIONS

- The IAS has strong internal consistency, convergent, and discriminant validity. It has been used as a diagnostic tool with many factor-structures ranging from 2 to 9 (e.g. Hadjistavropoulos & Asmundson, 1998; Kellner, 1986; Shaeiri et al., 2008; Sirri et al., 2008; Weck et al., 2009). It appears to be best conceptualized as a **unidimensional** construct in a substance use population; therefore, the total score can be used to measure clinical levels of health anxiety.
- Future studies should further explore the clinical utility of this measure in a substance use treatment population.

References can be found at this link: https://www.dropbox.com/s/x84pckv31v4j1wc/References%20on%20APA%202020%20Poster.docx?dl=0