

Background

Greco et al (2008) developed the Avoidance and Fusion Questionnaire for Youth (AFQ-Y) in order to assess psychological inflexibility in children through self-report. Generally, the construct assessed includes both cognitive fusion, an individual's attachment to the content of private events as if they were actually true, and experiential avoidance, attempts to avoid or alter private events. Psychological inflexibility is deemed problematic because it is implicated in the development of avoidant coping and psychopathology. In a non-clinical sample ($n = 859$; mean age 12.51) AFQ-Y correlated with self-reported anxiety but, considering the limitations of the study, encouraged future research to investigate the measure's usefulness in clinical populations and establish cut off scores.

Aim

Against this background, the aim of the current study was to evaluate the usefulness of the AFQ-Y in predicting a positive diagnosis of anxiety in a sample of in-patient adolescents and establish a cut off score for the measure.

Methods

Participants

Adolescents ($n = 111$) were recruited from a 16-bed adolescent inpatient unit which usually serves adolescents with severe behavior, psychiatric, and substance disorders who are characterized as treatment refractory. The adolescents in this sample ranged in age from 12 to 18, with a mean age of 16.06 ($SD = 1.42$). The sample contained 62 (55.9%) females and 49 (44.1%) males and had the following ethnic breakdown: 92.8% white, 1.8% Hispanic, 1.8% Asian, 1.8% black, 0.9% mixed, and 0.9% unreported.

Procedures

IRB approval was obtained from the appropriate board. Upon admission, adolescents and parents were introduced to the study and parental consent and youth assent were obtained. Adolescents were then consecutively assessed by doctoral level clinical psychology students, licensed clinicians, and/or trained clinical research assistants under the direct supervision of doctoral level psychology students.

Measures

The Avoidance and Fusion Questionnaire for Youth (Greco, Murrell, & Coyne, 2005) was used in the present study to measure experiential avoidance and cognitive fusion. The CDISC (Shaffer et al., 2000) was used to diagnose anxiety.

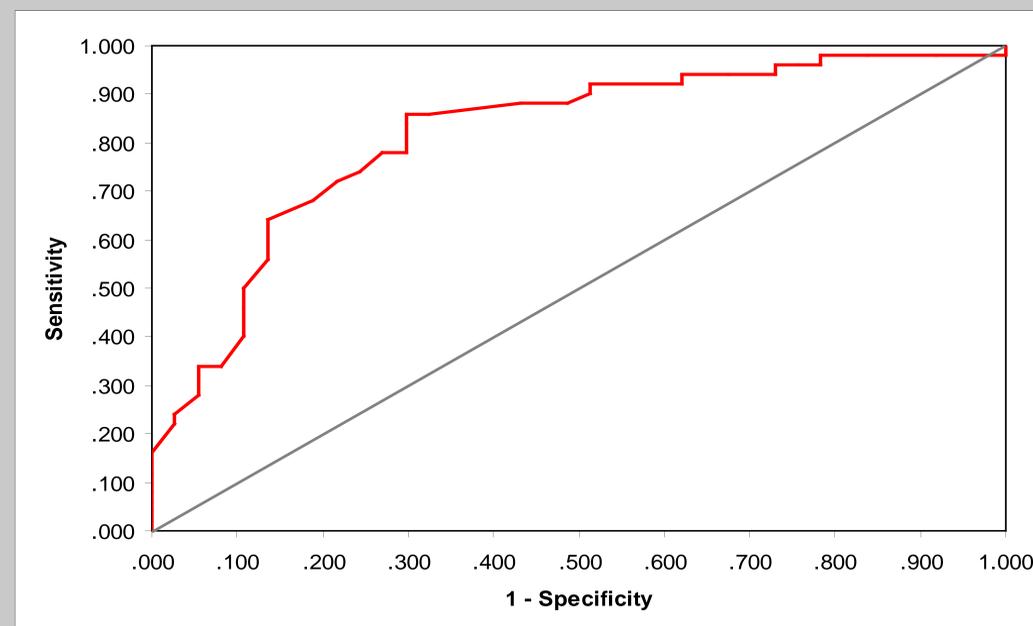
	Not at all True	A little True	Pretty True	True	Very True
1. My life won't be good until I feel happy.	0	1	2	3	4
2. My thoughts and feelings mess up my life.	0	1	2	3	4
3. If I feel sad or afraid, then something must be wrong with me.	0	1	2	3	4
4. The bad things I think about myself must be true.	0	1	2	3	4
5. I don't try out new things if I'm afraid of messing up.	0	1	2	3	4
6. I must get rid of my worries and fears so I can have a good life.	0	1	2	3	4

Data analysis

Receiver Operating Characteristics (ROC) analysis was used to assess the performance of the AFQ-Y in predicting a positive diagnosis of anxiety disorder on the Computerized Diagnostic Interview Schedule for Children (Shaffer et al., 2000) and establish a clinical cut off score. An ROC curve is created when the true positive rate (sensitivity) is plotted against the false positive (1 – specificity) rate. The area under the curve (AUC), can then be calculated using the non-parametric trapezoid method (Hanley & McNeil, 1982) and yields an index of accuracy. A measure is thought to have low diagnostic accuracy if its AUC is below .7, moderate accuracy from .7 to .9, and high accuracy when greater than .9 (Swets & Pickett, 1982). The measure's cut off score can be established by finding the intersection of the measure's sensitivity and specificity curves.

Results

Figure 1. ROC curve of AFQ-Y in predicting any anxiety disorder

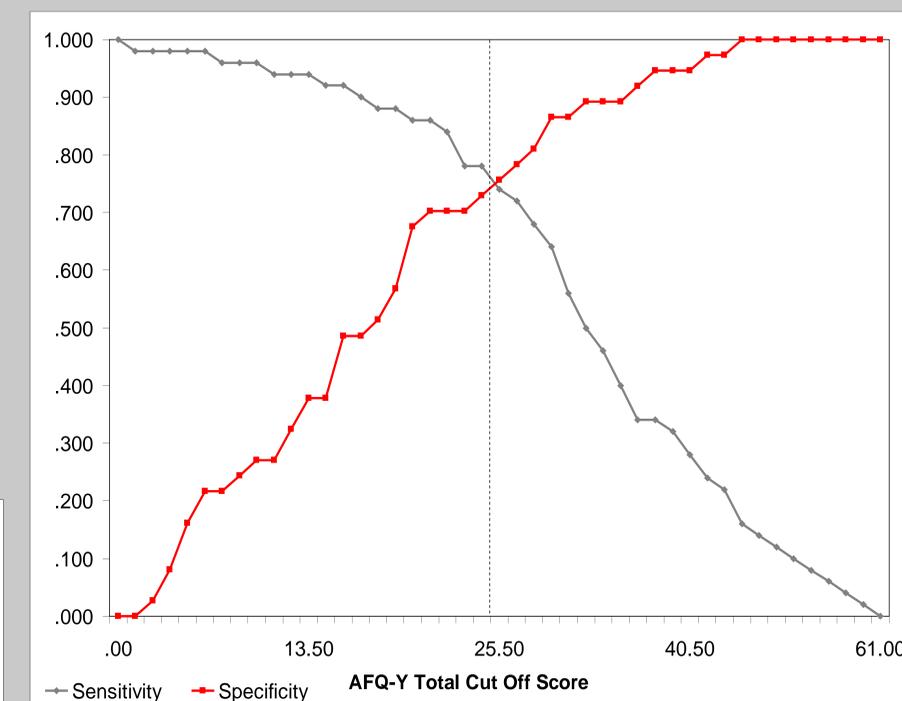


Notes. There were 50 cases positive for any C-DISC anxiety disorder and 37 cases negative for any C-DISC anxiety disorder in this analysis (24 cases excluded due to missing data). The AUC is .815 ($SE = .047$, $p < .001$), indicating moderate accuracy in discriminating adolescents with any diagnosis of anxiety.

The ROC curve between AFQ-Y and any anxiety disorder is shown in Figure 1 and shows that the area under the curve (AUC) and standard error were significant ($p < .001$), with an AUC of .815, indicating moderate diagnostic accuracy.

Additionally, plotting sensitivity and specificity (Figure 2) at different cut-off scores on the AFQ-Y indicated that the optimal cut-point, the intersection of sensitivity and specificity, for the measure is 25.5 ($Se = .74$, $Sp = .76$) when predicting anxiety disorder.

Figure 2. Sensitivity and specificity plotted against different cut-off scores on the AFQ-Y in reference to any anxiety disorder.



Notes. The optimal cut-off score is determined by the intersection of the sensitivity and specificity lines. As seen by the dotted line the optimal cut-off score in predicting a diagnosis of any anxiety disorder is 25.5 ($Se = .74$, $Sp = .76$).

Conclusions

Our analyses demonstrate a relationship among anxiety disorders and experiential avoidance such that elevated experiential avoidance, as measured by the AFQ-Y, has moderate diagnostic accuracy in predicting a diagnosis of anxiety disorder among inpatient adolescents. A total score of 25.5 on the AFQ-Y emerged as the optimal cut off score.