

“COGNITIVE FUSION QUESTIONNAIRE (CFQ) MEASUREMENT OF ACCEPTANCE AND COMMITMENT THERAPY DIAGNOSED WITH OBSESSIVE COMPULSIVE DISORDER.”

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Abstract:

When individuals get enmeshed in their own circumstances, it might lead to cognitive fusion (CF). One of the risk factors for different types of schizophrenia is rigid routines for CF. Another multidimensional assessment with strong validity and reliable performance, the Functional Fusion The surveys–7 (CFQ–7) is a commonly often used self-report tool for CF assessment. Its statistical qualities, however, have mostly been investigated using the classic test theory and not to be clinical populations. This study's objectives were to verify measurement reliability through medical conditions and clinical behavioral collections and examine the scale's suitability in an uncontrolled setting using item reaction theory.

Keywords: Obsessive Compulsive Disorder, Cognitive Fusion, “Non-Clinical and Clinical Psychological Samples”.

Introduction:

The seven-item Cerebral Fusing Question (CFQ) is a broad measure of thought synthesis (CF) that may be used in many circumstances. In fact, the CFQ-7 has emerged as the most used self-report tool for CF assessment in academic and hospitals. This measure is quick, cost-free, simple to administer, and straightforward to score. It is accessible in several languages, and research on its psychological features has been conducted in various nations and societal settings. Furthermore, a variety of research issues regarding CF and coping in the domains that include clinical and wellness psych among academic and non-clinical individuals have been addressed via the broad use of the CFQ-7. The capacity to disassociate oneself from one's emotions and

recollections and to pursue one's own objectives and moral principles in spite of someone's internal experiences is known as cognitive fusion. On the other hand, when individuals get enmeshed in or controlled by their own experiences, it may lead to conceptual fusion (CF). To put it another way, CF happens when behavior is influenced largely by ideas as well as emotions within than by actual interactions with the wider environment.

Materials and methods:

Participants

Regarding the clinical population, we utilized initial data from an ongoing comprehensive study that aims to compare the efficacy Using a traditional Cognitive-Behavioral therapy combined with an ACT-based strategy with learners asking assistance at University of Pisa counselling center. In order to take part in the research, individuals needed to meet the following criteria: they had to be a minimum of 18 years old, possess a high level of proficiency in the Italian language, and exhibit mild to moderate symptoms of depression and/or anxiety as determined by the “Hospital Anxiety and Depression Scale (HADS)”. Specifically, participants were required to score above 3 on either the anxiety or depression subscales of the HADS, while simultaneously scoring below 15 on both subscales.

The study included a cohort of 30 undergraduate students who sought psychological help at the counseling center. The majority of the participants were female, accounting for 60.7% of the total. Their ages “varied between 19 and 35, with a mean of 23.82 and a standard deviation of 3.04”.

Procedure

The Board of directors for institutionalized evaluation of the University granted approval for this investigation. The translation of the English edition of the CFQ-7 followed the back-translation design recommended by the International Test Commission. Initially, a proficient English speaker, who is a native speaker, translated the CFQ-7. After translating the CFQ-7 into English, the researchers made further adjustments to ensure that the final version had the highest possible linguistic equivalency to the original version.

Statistical analyses

“The IRT analyses were performed using IRTPRO 2.0. The Graded Response Model

(GRM)” was utilized, in accordance with the CFQ-7 response format. Initially, we confirmed the fundamental assumptions of this model by examining the data: local becoming independent, one-dimensionality, and the IRT model' applicability to the provided data. Regarding coherence, we evaluated the object's pattern to confirm normality. Next, we tested the CFQ-7's circuit organization using Confirming Factorial Analysis (CFA).

Results and Discussion:

Cognitive Fusion Questionnaires (CFQ)

The normality of the CFQ-7 items was assessed by examining their univariate distributions. The distribution of with skewness numbers of -.04 to .46 and asymmetry readings from -1.01 to -.51, every item displayed a usual pattern (Table 1). Subsequently, the unidimensional structure underwent testing by a “Confirmatory Factor Analysis (CFA). The goodness of fit metrics, including the Comparative Fit Index (CFI = .983), Tucker-Lewis Index (TLI = .974), and Root Mean Square Error of Approximation (RMSEA = .060), were all found to be satisfactory”.

Table 1

“Skewness, kurtosis, fit statistics, standardized factor loadings, item discrimination, and category threshold estimates (with the standard errors in brackets) of the seven items of the CFQ-7 in the non-clinical sample”.

Item	Sc	Ku	λ	S— $\chi^2(df)$	p	$a (SE)$	$b_1 (SE)$	$b_2 (SE)$	$b_3 (SE)$	$b_4 (SE)$	$b_5 (SE)$	$b_6 (SE)$
1	.04	-.65	.78	83.50 (68)	.097	2.39 (.26)	-1.78 (.17)	-.69 (.10)	-.21 (.09)	.82 (.11)	1.67 (.16)	2.63 (.28)
2	.46	-.50	.77	72.71 (61)	.144	2.46 (.27)	-1.29 (.13)	-.13 (.09)	.39 (.09)	1.21 (.13)	2.12 (.21)	2.90 (.35)
3	-.04	.85	.65	120.26 (92)	.022	1.59 (.18)	-2.38 (.27)	-1.15 (.15)	-.52 (.12)	.20 (.11)	1.12 (.15)	1.89 (.21)
4	.18	-.82	.71	74.76 (80)	.645	2.14 (.23)	-1.44 (.14)	-.61 (.10)	.06 (.09)	.67 (.11)	1.41 (.16)	2.20 (.23)
5	.0	-	.6	103.4	.08	1.47	-1.73	-.82	-.24	.67	1.71(.2	2.45

	8	.83	1	0 (88)		(.17)	(.21)	(.14)	(.11)	(.14)	1)	(.30)
6	.0	-	.7	65.10	.67	2.48	-1.79	-.79	-.18	.54	1.15	2.56
	1	.90	8	(71)	5	(.28)	(.16)	(.10)	(.09)	(.10)	(.13)	(.28)
7	.0	-	.7	82.70	.55	1.88	-1.69	-.81	-.24	.41	1.13	2.07
	1	1.0	0	(85)	1	(.21)	(.18)	(.12)	(.10)	(.10)	(.13)	(.21)
		1										

Once we confirmed that the scale was unidimensional, we proceeded to do unidimensional IRT analyses. The GRM model underwent testing, as well as the data on fitness demonstrated a satisfactory fit “(M2 = 1141.02, df = 749, $p < 0.001$; RMSEA = .05)”. The significance level of 0.05 was reduced using the Bonferroni correction to 0.003 (0.05 divided by 14). Each item exhibited a statistically insignificant “S— χ^2 value (Table 9), suggesting that all the items conform to the graded unidimensional model”.

In terms of dependability, the TIF demonstrated which the scale supplied enough data throughout a broad spectrum encompassing the characteristic (Fig 1). The test data spanned a range of around -2.50 standard deviations to approximately +3.00 standard deviations. Given that the θ distributions in a particular sample differed from “-2.60 to +3.19”, the scale provided useful information in relation to the sample scores. Furthermore, the quantity of test data was equal to or greater than 4, with values equal to or greater than “9 starting from a trait level of -1.50 to +2.00.” This range of the trait corresponds to an approximate r value of .90.

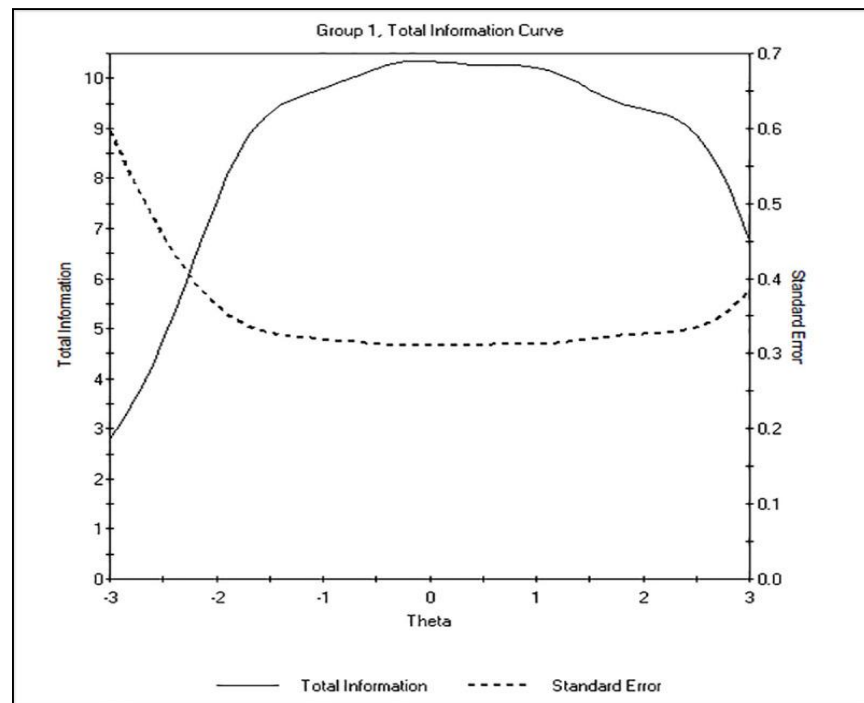


Figure: “1 Test Information Function (TIF) of the Cognitive Fusion Questionnaire-7 (CFQ-7) under the Graded Response Model (GRM) in the non-clinical sample (n = 30)”.

Subsequently, we assessed the “criterion validity of the CFQ-7 by use θ scores.” Table 10 demonstrates that, as anticipated, “CFQ-7 θ ” scores exhibited strong negative correlations with dedicated work and contentment in life, despite displaying large positive correlations with depression. The findings also indicated a negative correlation between devoted action and depression, as well as a positive correlation between committed action and life satisfaction.

Table 2

“Descriptive statistics and correlations between CFQ-7 total scores and measures of committed action, depression, and life satisfaction in the non-clinical sample (n = 258)”.

	1	2	3	4
“1 CFQ-7 θ scores”	-			
“2 CAQ-18 summed scores”	-.45***	-		
“3 BDI-I summed scores”	.51***	-.41***	-	

"4 SWLS summed scores"	-.47***	.41***	-.50***	-
<i>M</i>	-.01	89.01	8.59	21.29
<i>SD</i>	.99	14.03	7.72	9.08

*** " $p < .001$. CFQ-7: *Cognitive Fusion Questionnaire-7*; CAQ-18: *Committed and Action Questionnaire-18*; BDI-I: *Beck Depression Inventory*".

Conclusion:

This research looks at the CFQ-7's measurement invariance in a specific subset of college pupils who show slight to slight signs of distress and/or panic. In addition, all of the study's volunteers were young professionals, with a greater percentage of females than boys. Moreover, the CAQ's inside consistency hadn't been fully verified in Italian samples, despite our medical conditions group's results showing it to be adequate. It is significant to highlight that professional volunteer in this research completed the CFQ-7 online, whereas non-clinical subjects completed the inspection process using paper and pencil. There are concerns about the validity of findings between electronic and conventional written in paper survey procedures, and also on the caliber of information gathered via surveys carried out online. Therefore, future investigations should additionally examine if the data collection methodology influences the responses to the CFQ-7 questionnaire.

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