CLINICAL ASSESSMENT IN A PROFESSIONAL SETTING: ARE THERE IMPLICATIONS FOR SELF-REPORTS OF PSYCHOPATHOLOGY?

Bárbara Gonzalez[1,3], Rosa Novo[2,3], & Maria João Afonso[2]
[1]University Lusophone of Humanities and Technologies, HEI-Lab (Portugal)
[2]Faculty of Psychology of University of Lisbon (Portugal)
[3]CICPSI (Portugal)

Abstract

In the field of psychological assessment, response biases pose a great problem, and can lead to misleading decisions, with negative impact regardless of the context. Both the underreport of personality characteristics and psychopathological symptoms and the overreport of problems and symptoms are current threats to this field. The clinical context is one on which both response attitudes occur. The clinical-organizational context (where clinical psychology services are provided in the individuals´ professional setting) is very specific, with particularities that have hardly been studied, so little is known about underreporting and overreporting in this type of clinical assessment. This study intends to explore and compare two contexts, clinical and clinical-organizational, in response attitudes and their potential implications on the report of psychopathology. Specifically, this study has three aims: to identify if there are differences between individuals of the two contexts in higher order psychopathology indicators and specific clinical problems; if these differences would be due to response attitudes (i.e., tendency to overreporting and to underreporting), and which are the best scales to differentiate individuals doing overreporting and underreporting in both samples. A total of 516 participants, grouped in two samples, Clinical ($n = 277$; M_{age} 41.50, SD 11.54), and Clinical-Organizational ($n = 239$; M_{age} 42.92, SD 9.16) were assessed with the Minnesota Multiphasic Personality Inventory-2 - Restructured Form (MMPI-2-RF) Validity, Higher-Order and Restructured Clinical scales. The MANOVAS showed significant differences between the two samples in the composite of underreport scales, overreport scales, Higher-Order scales, and Clinical scales, with the clinical-organizational sample having higher underreport levels than the clinical sample, and lower overreport levels, as well as lower symptomology and clinical problems. The correlations pattern between the different sets of scales supports the conclusion that the response attitudes significantly impact the report of psychopathology. The F-r and Fp-r overreport scales, and the K-r underreport scale are the best ones in differentiating the two samples. The results suggest that the professional setting may influence the disclosure of psychological difficulties and problems, thus having impact on psychological assessment.

Keywords: Underreporting, overreporting, clinical assessment, organizational context, MMPI-2-RF.

1. Introduction

The clinical-organizational context – where clinical psychology services are provided inside the individuals´ professional setting – is a very specific context, which has been hardly approached in research and is not mentioned in studies in the field of psychology. In the scientific literature, the role of psychological assessment on professional contexts, namely high stakes contexts, is addressed only within the scope of personnel recruitment and selection (e.g., Cao & Drasgow, 2019; Levashina et al., 2014) and never within the one of clinical intervention with employees having mental health complaints or clinical disorders. Therefore, this seems to reflect the assumption that individuals will have a similar attitude concerning the disclosure of their problems, complaints or symptoms, independently of the assessment or intervention context, either a mental health or a professional one.

The response attitudes to self-report psychological tests are very relevant, as they may alter the results and undermine the goal of psychological assessment. Two opposite response attitudes are at stake, the underreporting vs. the overreporting of symptoms and undesirable personality characteristics (Dhillon, Bagby, Kushner, & Burchett, 2016).

2. Objectives

Thus, this exploratory study aims at comparing two samples of individuals involved in psychological assessment processes, namely of personality and psychopathology – one from a clinical context, and the other from a clinical-organizational one. The dependent variables are, primarily, the measures of the response attitudes and, secondarily, the clinical results – which are generally assumed to be influenced by the former. Therefore, we intend to assess if this influence is similar in the two samples.

3. Methods

3.1. Participants

Participants were 516, of both genders, with age $\geq$ 18 years, and valid protocols, from two samples: Clinical – with participants from clinical centers in the community and mental health units; Clinical-Organizational – with participants from clinical centers of public or private institutions in which they work. In both samples, participants presented clinical complaints or clinical signs that motivated a psychological assessment.

The Clinical sample included 277 participants with valid protocols, 73% men, with mean age M_{age} = 41.50 (SD = 11.54), and education $M_{school\ years}$ = 11.47 (SD = 3.39). The Clinical-Organizational sample included 239 participants, 86% men, with mean age M_{age} = 42.92 (SD = 9.16) and education $M_{school\ years}$ = 11.61 (SD = 2.14).

The samples revealed significant differences in gender variable only, χ^2 (1) = 13.648, p = .000.

3.2. Instrument

MMPI-2-RF (Ben-Porath & Tellegen, 2011) is an inventory assessing personality and psychopathology. In this study, the following measures were used:

a) two underreport validity scales – Uncommon Virtues (L-r), and Adjustment Validity (K-r);

b) five overreport validity scales – Infrequent Responses (F-r), Infrequent Psychopathology Responses (Fp-r), Infrequent Somatic Responses (Fs-R), Symptom Validity (FBS-r), and Response Bias Scale (RBS);

c) the three Higher-Order (H-O) scales – Emotional/Internalizing Dysfunction (EID), Thought Dysfunction (THD), and Behavioral/Externalizing Dysfunction BXD); and

d) the nine Restructured Clinical (RC) scales – Demoralization (RCd), Somatic Complaints (RC1), Low Positive Emotions (RC2), Cynicism (RC3), Antisocial Behavior (RC4), Ideas of Persecution (RC6), Dysfunctional Negative Emotions (RC7), Aberrant Experiences (RC8), and Hypomanic Activation (RC9).

3.3. Procedure

The instrument was administered individually by clinical psychologists, in accordance with the test standardized guidelines and scientific research norms. Participants signed an informed consent and privacy was in conformity with the international principles for psychological research. The research was approved by two Ethic Committees.

4. Results

Pertaining to the underreport Validity scales, the MANOVA showed significant differences between the two samples in the composite $F(1, 514)$ = 31.55, p < .001, Wilks' Lambda = .891, partial η^2 = .109 (see Table1).

Table 1. Descriptive Statistics (Mean and Standard-deviation) for the Underreport Validity Scales and Analysis of Variance (ANOVA) – Clinical and Clinical-Organizational Samples.

	Clinical n = 277		Clinical Organizational n = 239		ANOVA F(1,515)
	M	SD	M	SD	
L-r	60.61	11.82	64.94	11.89	17.166, p < .001, η^2 = .032
K-r	41.93	9.14	49.31	12.03	62.469, p < .001, η^2 = .108

In the overreport Validity scales, the MANOVA showed significant differences in the composite $F(4, 511) = 14.51$, $p < .001$, Wilks' Lambda = .875, partial $\eta^2 = .125$ (see Table 2).

Table 2. Descriptive Statistics (Mean and Standard-deviation) for the Overreport Validity Scales and Analysis of Variance (ANOVA) – Clinical and Clinical-Organizational Samples.

	Clinical $n = 277$		Clinical Organizational $n = 239$		ANOVA $F(1,514)$
	M	*SD*	*M*	*SD*	
F-r	82.74	22.53	67.61	25.02	52.268, $p < .001$ $\eta^2 = .092$
Fp-r	75.74	19.04	63.87	16.78	55.629, $p < .001$, $\eta^2 = .098$
Fs-r	67.84	20.54	59.23	19.11	24.099, $p < .001$, $\eta^2 = .045$
FBS-r	64.35	15.60	59.32	16.54	12.641, $p < .001$, $\eta^2 = .024$
RBS	72.32	18.97	64.95	19.92	18.477, $p < .001$, $\eta^2 = .035$

Regarding the Higher-Order scales, the MANOVA showed significant differences in the composite $F(2, 512) = 24.583$, $p < .001$, Wilks' Lambda = .874, partial $\eta^2 = .126$ (see Table 3).

Table 3. Descriptive Statistics (Mean and Standard-deviation) for the Higher-Order Scales and Analysis of Variance (ANOVA) – Clinical and Clinical-Organizational Samples.

	Clinical $n = 277$		Clinical Organizational $n = 239$		ANOVA $F(1,515)$
	M	*SD*	*M*	*SD*	
EID	65.48	12.33	55.88	15.44	61.606, $p < .001$, $\eta^2 = .107$
THD	66.31	16.24	57.90	15.14	36.595, $p < .001$, $\eta^2 = .066$
BXD	52.48	10.18	48.91	8.50	18.285, $p < .001$, $\eta^2 = .034$

Finally, the MANOVA showed significant differences in the composite of the nine Clinical scales $F(8, 506) = 10.444$, $p < .001$, Wilks' Lambda = .843, partial $\eta^2 = .157$ (see Table 4).

Table 4. Descriptive Statistics (Mean and Standard-deviation) for the Restructured Clinical Scales and Analysis of Variance (ANOVA) – Clinical and Clinical-Organizational Samples.

	Clinical $n = 277$		Clinical Organizational $n = 239$		ANOVA $F(1,515)$
	M	*SD*	*M*	*SD*	
RCd	66.35	11.83	57.12	14.46	63.614, $p < .001$, $\eta^2 = .110$
RC1	64.30	13.89	56.61	16.18	33.711, $p < .001$, $\eta^2 = .062$
RC2	64.03	13.88	57.26	15.57	27.221, $p < .001$, $\eta^2 = .050$
RC3	59.94	11.08	55.40	11.18	21.307, $p < .001$, $\eta^2 = .040$
RC4	53.94	10.60	47.67	9.91	47.815, $p < .001$, $\eta^2 = .085$
RC6	68.82	15.72	62.92	14.97	18.898, $p < .001$, $\eta^2 = .035$
RC7	60.77	12.84	52.96	14.83	41.065, $p < .001$, $\eta^2 = .074$
RC8	63.39	14.57	54.44	13.37	52.282, $p < .001$, $\eta^2 = .092$
RC9	53.40	9.26	50.52	8.65	13.171, $p < .001$, $\eta^2 = .025$

Among the validity scales, the K-r underreport scale and the F-r and Fp-r overreport scales are the best ones in differentiating the two samples. The mean correlation of these three scales with the High-Order and the Clinical scales is .637 in the clinical-organizational sample, and .501 in the clinical one.

5. Discussion

Although the two samples have participants with clinical complaints or signs of psychopathology, they present their psychological distress and psychopathology in different magnitudes, as they have significant differences in all sets of scales. In the underreport scales, the clinical-organizational sample has higher mean values in both L-r and K-r, and reached on L-r a level that suggests social desirability bias, i. e., a denial of common shortcomings most people are willing to admit. Pertaining to K-r, which identifies a tendency to claim unrealistically positive psychological adjustment, the clinical-organizational sample displays values identical to the ones of students under standard instructions in the study of Brown and Selbom (2020), and higher than the ones reported by Crighton et al. (2017). These are common mean values in the normal population, but elevated and uncommon in the clinical population.

On the contrary, the clinical-organizational sample has significantly lower values in the overreport scales, with only two clinically significant elevations, while the clinical one has clinically significant elevation in all but one scale. The values of the clinical sample are relatively close to the mean ones of three specific groups of psychiatric patients studied by Marion, Selbom and Bagby (2011).

Although there may exist some cases of overreport in the clinical-organizational sample, the results indicate that underreport prevails in this sample. As this response attitude influences the level of disclosure throughout the test, this sample presents moderate to low values of distress and emotional, somatic and behavioral problems, in the Higher-Order and RC scales. This sample has no clinically significant elevation in the three High-Order scales, while the clinical one has it on Emotional/internalizing dysfunction and Thought dysfunction. It is relevant that our clinical-organizational sample has values identical to the ones of students with standard instructions (Brown & Selbom, 2020), higher than the ones reported by Crighton et al. (2017) in Behavioral/externalizing dysfunction, and lower than the ones described by Brown and Selbom (2020), in Emotional/internalizing dysfunction.

In the Restructured Clinical scales, the clinical sample does not have many significant elevations (in Demoralization and Ideas of Persecution, only), having in general lower values than the psychiatric patients in the study of Marion et al. (2011). However, the mean values of this sample are compatible with the ones of a clinical population with different types of clinical problems and personality disorders, while in the clinical-organizational sample, where no clinically significant elevation was found, the mean values are far from representing a clinical sample. This sample presents itself more as a normal sample from the community, having Antisocial Behavior scores lower than the students (Brown & Selbom, 2020; Crighton et al., 2017), Dysfunctional Negative Emotions lower than the ones described by Brown and Selbom (2020), and Aberrant Experiences lower than the reported by Crighton et al. (2017).

Finally, the correlations pattern shows the stronger association, in the clinical-organizational sample, between both the higher tendency to claim unrealistically positive psychological adjustment and the lower report of infrequent responses, and of infrequent psychopathology responses, with the Clinical Higher-Order and Restructured scales, suggesting a higher impact of response attitude bias in the psychopathology measures for the clinical-organizational sample than for the clinical one.

Thus, in conclusion, it seems clear that, despite the clinical nature of these two samples, the context in which they are assessed and treated is different and has implications for the results. The fact that the clinical-organizational sample has mean values, in scales pertaining to psychological adjustment, close to the ones of normal student samples, and results in several psychopathology scales also similar and even lower than the ones presented by these samples, seems to indicate that these patients are not fully disclosing their psychological symptomology, when assessed in services linked to their workplace. These results draw the attention to the underrepresentation of psychological symptomology in persons assessed inside the organizations, and to the risk this poses to themselves, and to their professional performance and responsibility, something even more relevant in high-stakes professions. This issue demands attention from psychologists in these services, and more research in this field is needed, maybe in order to identify different cut-offs for the clinical scales` interpretation in this population.

References

Ben-Porath, Y. S., & Tellegen, A. (2011). *MMPI-2-RF (Minnesota Multiphasic Personality Inventory-2 Restructured Form): Manual for administration, scoring, and interpretation*. Minnesota: University of Minnesota Press.

Brown, Tiffany A. & Sellbom, M. (2020) The Utility of the MMPI–2–RF Validity Scales in Detecting Underreporting, Journal of Personality *Assessment, 102*(1), 66-74, DOI: 10.1080/00223891.2018.1539003

Cao, M., & Drasgow, F. (2019). Does forcing reduce faking? A meta-analytic review of forced-choice personality measures in high-stakes situations. *Journal of Applied Psychology*, *104*, 1347-1368.

Crighton, A., Marek, R., Dragon, W., & Ben-Porath, Y. (2017). Utility of the MMPI-2-RF validity scales in detection of simulated underreporting: Implications of incorporating a manipulation check. *Assessment, 24*(7), 853–864. DOI: 10.1177/1073191115627011

Dhillon, S., Bagby, R. M., Kushner, S., & Burchett, D. (2017). The impact of underreporting and overreporting on the validity of the Personality Inventory for DSM–5 (PID-5): A simulation analog design investigation. *Psychological Assessment*, *29*, 473–478.

Levashina, J., Weekley, J.A., Roulin, N., & Hauck, E. (2014). Using Blatant Extreme Responding for detecting faking in high-stakes selection: Construct validity, relationship with general mental ability, and subgroup differences. *International Journal of Selection and Assessment*, *22*, 371-383.

Marion, B. E., Selbom, M., & Bagby, R. M. (2011). The detection of feigned psychiatric disorders using the MMPI-2-RF overreporting validity scales: An analog investigation. *Psychology, Injury and Law*, *4*, 1-12. DOI 10.1007/s12207-011-9097-0