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Adaptation and Psychometric Evaluation of Tthe Italian Version of the Attitude to Personality Disorder Questionnaire (APDQ)

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Abstract

The aim of the current study was to validate the Italian version of the Attitude to Personality Disorder Questionnaire (APDQ), assess its psychometric properties, and investigate nurses' attitudes toward patients with personality disorders. An Italian version of the APDQ was produced and administered to nurses working in the Bologna Mental Health Department. The instrument demonstrated good psychometric proprieties and a robust structure and supported the five-factor solution of the original English version. Findings showed that nurses experience negative feelings toward patients with personality disorders and found them difficult to care for. Attitude was found to be better among less experienced nurses and among those working in inpatient settings. The Italian version of the APDQ appears to be a useful instrument for assessing clinicians' attitudes in a variety of settings. Italian nurses were inclined to perceive these patients in a negative manner, frequently expressing aversive feelings.

Personality disorders (PDs), diagnosed according to the *Diagnostic and Statistical Manual of Mental Disorders*, fifth edition (*DSM-5*; American Psychiatric Association, 2013), show high prevalence values in both general and clinical populations. Estimated rates of any PD in community populations range between 3.9% and 15.7% (Huang et al., 2009), while rates among psychiatric patients tend to vary over a greater range, between 39.4% and 52.0% (Keown, Holloway, & Kuipers, 2002; Newton-Howes et al., 2010). PDs cause significant impairment in general functioning (Johnson et al., 2005; Skodol et al., 2002), and both primary care and mental health services frequently deal with patients with a PD diagnosis (Bender et al., 2001; Rendu, Moran, Patel, Knapp, & Mann, 2002). Despite the extensive use of mental health resources, health personnel generally perceive PD patients in a negative manner. PD patients are seen as manipulative, attention-seeking, annoying, less deserving of care (Deans & Meocevic, 2006; Lewis & Appleby, 1988), more in control of their negative

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The Italian version of the instrument is freely available on request to the authors.

behaviors, and less likely to change compared with other patients (Markham & Trower, 2003). Moreover, the clinician's awareness of a PD diagnosis is associated with the belief that patients will be harder to manage (Newton-Howes, Weaver, & Tyrer, 2008). In fact, registered mental health nurses expressed less social rejection toward patients with a diagnosis of schizophrenia and perceived them to be less dangerous than patients with a borderline personality disorder (BPD) label (Markham, 2003). In addition, they expressed greater negativity about their experience working with this group compared to the other patient groups (Markham, 2003). Mental health professionals therefore tend to avoid these patients (Black et al., 2011) or to show negative reactions toward them (Sidley & Renton, 1996).

The attitude of mental health staff, a crucial factor in determining the nature of the specialist-patient relationship, is likely to affect PD patient care, as well as the quality of the treatment provided. It has been shown that nurse-patient interactions can have a major influence on the patient care experience and that patients believe that these relationships are important in their care (Shattell, 2004).

The majority of studies investigating how mental health professions respond to PD patients have been based on different methods, including ad hoc questionnaires (Black et al., 2011; Cleary, Siegfried, & Walter, 2002; James & Cowman, 2007), in-depth interviews (McGrath & Dowling, 2012; Nehls, 2000), list of items (Bodner, Cohen-Fridel, & Iancu, 2011), series of hypothetical statements (Gallop, Lancee, & Garfinkle, 1989), and case vignettes (Lewis & Appleby, 1988). Unfortunately, this heterogeneity in approaches does not allow for comparisons among different groups and settings, or across time. The Attitude to Personality Disorder Questionnaire (APDQ) was developed in the United Kingdom in order to compensate for the lack of a scale assessing global attitude to PD (Bowers & Allan, 2006).

Objectives

The aims of this study are to validate the Italian version of the APDQ, to assess its psychometric properties, and to use this instrument to investigate nurses' attitudes toward PD patients in Italy.

Methods

APDQ's Psychometric Properties

The APDQ is a self-report questionnaire composed of 37 items (Table 1) representing both positive and negative feelings commonly experienced among specialists caring for PD patients. Each item has six response options, from 1 (*never*) to 6 (*always*), indicating the frequency with which the feeling is experienced (Bowers & Allan, 2006). Respondents are specifically requested to refer to their general overall attitude toward patients with a PD of any type as defined by the commonly used diagnostic system. Positive and negative items are alternated in the questionnaire to prevent "response set" in answering, where greater total score corresponds to a more positive attitude to PD patients (Bowers & Allan, 2006). Bowers and Allan (2006), the creators of the APDQ, evaluated its psychometric properties on three independent samples. The first study was a principal components analysis of the

scale that showed good internal consistency (Cronbach's $\alpha = .94$), sampling adequacy for the analysis ($KMO = .949$), and a satisfactory Bartlett's test of sphericity ($p < .0005$). Varimax rotation found that 35 out of 37 items loaded on five factors, accounting for 56.3% of the total variance. The five components were named Enjoyment versus Loathing, Security versus Vulnerability, Acceptance versus Rejection, Purpose versus Futility, and Exhaustion versus Enthusiasm. The second study evaluated the APDQ test-retest reliability. Intraclass correlation coefficients were good to excellent, ranging from .72 (Acceptance) to .85 (Security). The third study was a confirmatory factor analysis (CFA) that confirmed the global five-factor model with an Akaike information criterion (AIC) of 1509.73, a χ^2/df ratio of 2.33, and a normed fit index (NFI) of .56, indicating a reasonable, although not perfect, fit.

Translation

An Italian version of the APDQ was produced using the “forward-backward” procedure (Maneesriwongul & Dixon, 2004) to translate the questionnaire from English into Italian. Two professional translators independently produced two forward-translations and after a meeting, agreed on a common version. A psychologist (F.M.) and a psychiatrist (M.M.) then revised the Italian version to address scientific terminology and conceptual equivalence. The resulting forward-translation version was then ‘backward translated’ by a professional English-Italian translator who worked to produce an English version from the Italian one. The English version was then compared with the original APDQ and was sent to the author (Len Bowers) to be revised for the final translation.

Sample and Data Collection

The final Italian version of the APDQ was administered to a selected sample of nurses working in the Bologna Mental Health Department. Specifically, eight community mental health centers, three acute locked inpatient wards, and three intensive treatment clinics were involved in the study. All these services, except one intensive treatment clinic, agreed to participate in the survey. During the staff meeting, psychiatric nurses were briefly informed about the APDQ and invited to complete it. Before starting the questionnaire, the enrolled nurses were instructed to read through the standardized definition of a PD diagnosis provided by the instrument:

By PD we mean personality disorder by any commonly used diagnostic system, including PD combined with other conditions, e.g., Learning Disability, Schizophrenia, etc. We recognize that PD patients vary a lot, but these difficult people do exist and we do have to manage and treat them. The behaviors typical of PD people are impulsive, histrionic, antisocial, immature, and paranoid. For the purposes of this questionnaire we would like you to think about your feelings towards PD patients overall. We realize that you may have different mixtures of feelings about different PD patients you have come across in the past. For this questionnaire we would like to you try and average those out and tell us what your responses are in general towards PD people as a whole.

Sociodemographic data (such as age and gender) and information about nurses' clinical practice (years of practice in psychiatry, nurses' office location) were collected through an ad hoc form enclosed with the instrument. The questionnaires were completed anonymously.

Participants from the enrolled centers were 180 nurses out of 249 (72%) working in the Bologna Mental Health Department. They were mostly from outpatients setting ($n = 125$; 69.4%). The majority of nurses were female ($n = 114$; 63.3%) and were between 40 and 49 years old. Their average duration of work in psychiatric setting was 21.8 (± 8.8) years.

Statistical Analysis

SPSS 15.0 for Windows (Statistical Package for Social Sciences software, Chicago, IL) and Mplus 6.1 (Muthén & Muthén, 1998–2010) were used for the data analysis. Descriptive statistics included mean and standard deviation (SD), frequencies (%), and variables' distribution assessed using the Shapiro-Wilks test. A CFA was performed using the weight least square means and variance (WLSMV) estimator to handle deviation from normal distribution (Shapiro-Wilks test $p < .05$). The model's fit was evaluated through root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis index (TLI), and χ^2/df (Hu & Bentler, 1998; Marsh & Hocevar, 1985; Millsap, 2011). A $\chi^2/df < 2$ or 5, an RMSEA .05 or .08, and a CFI/TLI .95 or .90 would indicate optimal or sufficient fit, respectively. Cronbach's alpha was calculated to assess the factors' reliability, where coefficients greater than .70 indicate good reliability.

Results

Confirmatory Factor Analysis

The WLSMV estimator was used because all variables were not normally distributed (Shapiro-Wilks tests $p < .001$). The five-factor model by Bowers and Allan (2006) was tested and successfully replicated on our sample. The model had good fit indexes (RMSEA = .07, CFI/TLI = .96/.95, $\chi^2/df = 1.90$; Table 2). The five factors of the APDQ also showed optimal reliability as demonstrated by the Cronbach's alpha coefficients: F1 = .88; F2 = .94; F3 = .91; F4 = .84; F5 = .86. The Cronbach's alpha of the total score was 0.81, indicating good internal consistency of the scale. There were significant correlations among factors (Table 3), except between Factor 1 (Enjoyment) and Factor 2 (Security).

The overall score of the Italian sample (mean = 19.43, $SD = 4.61$) was obtained by summing factors "Piacere" (Enjoyment; mean = 3.04; $SD = .71$), "Sicurezza" (Security; mean = 4.19, $SD = 1.15$), "Accettazione" (Acceptance; mean = 4.32, $SD = 1.34$), "Risolutezza" (Purpose; mean = 4.08, $SD = 1.15$), and "Entusiasmo" (Enthusiasm; mean = 4.04, $SD = 1.23$). The mean score of the Italian sample was in line with the normative value (mean 19.8; $SD 2.9$) from the Bowers and Allan (2006) study in the population of nurses working in psychiatric units.

While men showed a higher Entusiasmo score than women (means = 3.9 vs. 4.3; $t = -2.10$, $p = .04$), no further statistically significant differences were found between gender. In exploring the differences between experienced (more than 20 year of experiences; $N = 96$) and less experienced nurses (less than 20 year of experiences; $N = 68$), less experienced

participants had a higher score on Risolutezza than the experienced participants (means = 3.9 vs. 4.3; $t = -2.16$, $p = .03$). No association between years of experience, APDQ factors, and total score was observed. Several differences were found comparing participants by settings type, specifically between the community mental health center (CMHC) and the inpatient-settings (SPD&RT). Participants working in SPD&RT had higher scores on Sicurezza (means = 3.9 vs. 4.8; $t = -5.89$, $p < .001$), Accettazione (means = 4.1 vs. 4.9; $t = -5.37$, $p < .001$), Risolutezza (means = 4.0 vs. 4.3; $t = -1.98$, $p = .05$), Entusiasmo (means = 3.8 vs. 4.5; $t = -3.45$, $p = .001$), and APDQ total score (means 18.6 vs. 21.; $t = -4.55$, $p < .001$) compared to participants in the CMHC.

Discussion

Assessing nurses' attitudes toward PD patients is a critical factor in patient care because staff opinion is likely to influence the quality of treatment and the patients' perception of their care experiences. Because no scale has been designed for Italian mental health professionals, the aim of the present study was to validate the Italian version of the APDQ and to assess its factorial structure in a sample of Italian psychiatric nurses. According to Bowers and Allan's (2006) findings, the Italian version of the APDQ showed good internal consistency and a comparable factor solution. The five factors from the original version of the scale were all confirmed in our study. The items loading onto each factor were identical in both factor structures, with the exception of Item 29, which did not appear in our analysis.

With respect to nurses' opinion toward PD, the overwhelming majority of our sample noted that working with such patients produced a lower level of enjoyment, confirming that nurses find PD patients difficult to care for and have an adverse attitude toward them. Indeed, items with the highest average scores were those representing strong aversion (APDQ Item 20), detachment (APDQ Item 25), oppression (APDQ Item 24), and fear (APDQ Item 16). Conversely, items with the lowest average scores were those describing admiration (APDQ Item 14) and enthusiasm (APDQ Item 28). These findings are in line with those shown in a previous study (Bowers, Callaghan, et al., 2003) in which the normative value (mean 19.8, SD 2.9) for the APDQ was defined for nurses working in psychiatric units. Moreover, distress may also influence personnel disposition, where previous findings demonstrated that higher levels of distress among psychiatric nurses, especially burnout, positively correlated with a critical attitude toward patients (Katsuki, Goto, & Someya, 2005). In particular, nurses of psychiatry wards seemed to be at high risk for distress, showing significantly higher emotional exhaustion compared to personnel working in other wards (Sahraian, Fazelzadeh, Mehdizadeh, & Toobaee, 2008).

When we tested the influence of nurses' experience on attitude toward PD, we considered nurses with 20 or more years of clinical experience as highly experienced nurses on the basis of the sample's features, which was mainly composed of middle-aged female nurses with many years of practice. Splitting the sample in these two groups, we found that less experienced nurses (less than 20 years of clinical experience) showed a better attitude than those with more clinical experience (more than 20 years of clinical experience). This result, also supported by Bowers, Callaghan, et al. (2003), highlighted the higher sense of futility in the 121 nurses with more years of experience working in high-security hospitals.

When we considered clinical settings (inpatients vs. outpatients), we found a significant difference among nurses. Specifically, attitude was found to be better among nurses working in inpatient settings, especially regarding the Acceptance and Security dimension. While previous research about staff attitude toward personality disorders did not compare across clinical settings, studies conducted on attitude toward psychotic patients revealed different findings. Nurses employed in a community setting held more positive attitudes toward psychotic patients than did their colleagues who worked in an inpatient setting (Linden & Kavanagh, 2012). Furthermore, nurses working in an inpatient setting held more socially restrictive attitudes, indicating that they felt individuals with schizophrenia were dangerous and should be avoided (Linden & Kavanagh, 2012).

The importance of the organizational context for the staff's attitude toward PD has been highlighted in other studies where the lack of a clear treatment program and sense of direction has led to loss of willingness, disappointment, frustration, and low morale (Bowers, McFarlane, et al., 2003). Italian nurses working in inpatient settings may have perceived a better organizational structure and sense of efficacy and, as a result, held a more favorable stance. As such, the higher score of the inpatient nurses on Acceptance and Security may be driven by external factors, such as the organizational context, rather than by personal sentiments regarding PD patients, or the factors related to diagnosis and symptoms. Moreover, inpatient nurses may view PD patients as more mentally ill and less in control of their behavior due to the acute symptoms seen by nurses in inpatient settings, resulting in a greater willingness to accept them as mentally ill. Finally, since outpatient settings generally provide longer-term treatments, staff members are frequently exposed to relapses and reoccurrences that may increase frustration and negative feelings, consequently affecting the clinicians' acceptance of PD patients.

The APDQ provides useful information on staff needs and can aid in the development of education and training with respect to the difficulties often faced in managing PD care. The management of this clinical population is notoriously problematic due to poor treatment compliance (Chiesa, Martino, & Pozzi, 2010; Martino, Menchetti, Pozzi, & Berardi, 2012) and the difficulties in maintaining balanced relationships with the clinicians as well as the people and family members who have contacts with patients (Martino et al., 2014). A psychometric instrument that assesses the attitude of clinicians and staff is important in evaluating and eventually preventing negative attitudes toward patients with PD because these attitudes can drastically affect general PD patient care and the quality of treatment that is provided. Findings from the present study lend support for the use of the ADPQ to identify when the implementation of skill trainings and regular educational updates about patients with PD may be needed. The APDQ may be used to measure the change in attitude after specific trainings, but may be amenable to a strong response bias. As evidenced by other instruments that have been used to assess changes in attitudes after training (Krawitz, 2004), the utility of the APDQ in assessing changes after training is yet to be established.

In addition to staff education and training, given the prevailing negative attitudes held by the majority of staff, it is important to identify an access strategy for adequate staff support. Clinical supervision could be provided to clinicians who work with PD to reflect on and explore practice issues with these clients, including concepts such as therapeutic boundaries.

A structured approach to clinical supervision is recommended as the preferred method for assisting staff due to the rapidly changing demands of mental health service delivery, including the demands of working with these perceived difficult clients. Clinical supervision, with its potential for personal and professional development, may help offset the reduced personal accomplishment (Melchior, Bours, Schmitz, & Wittich, 1997) felt by staff and cited as a major contributing factor to perceiving this client group as more difficult than other client groups.

Study Limitations

A limitation of this study relates to the sample features. Ideally, the number of participants should have been more equally distributed across age, gender, years of experience, and setting. Although nursing samples are generally composed of middle-aged female participants, we acknowledge that our sample was overrepresented and that the findings may not be applicable to all nurses. Moreover, because we considered only nurses, results may not generalize to other mental health professionals, such as doctors, psychologists, or social workers. Another possible improvement to the current study would have been to interview the participants themselves to gain greater insight into their attitudes.

Conclusions

Despite some differences in the factor solution, the Italian version of the APDQ showed high similarity with the original version, indicating good psychometric properties and a robust structure. The results found on attitude toward PD confirmed the trend found in the literature. Specifically, Italian nurses were inclined to perceive PD patients in a negative manner and frequently expressed aversive feelings. Staff perceptions were likely to be influenced by a combination of individual character and organizational structure. Further investigations are needed in order to clarify the variables influencing the attitude toward PD. Overall, the Italian version of the APDQ appears to be a useful instrument, suitable for outcome studies, with the aim of comparing clinicians' attitudes in different settings and across repeated assessments.

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Table 1
Nurses' Responses to the Attitude to Personality Disorder Questionnaire (APDQ): Mean and Standard Deviation (SD)

Item number	Item (Answers range from 1 [never] to 6 [always])	Mean $\pm$ SD
4	I respect PD patients	5.188 $\pm$ 1.152
20	Interacting with PD patients makes me shudder	4.644 $\pm$ 1.823
25	I feel that PD patients are alien, other, strange	4.569 $\pm$ 1.786
24	I feel oppressed or dominated by PD patients	4.422 $\pm$ 1.592
16	I feel frightened of PD patients	4.400 $\pm$ 1.591
30	I feel outmaneuvered by PD patients	4.305 $\pm$ 1.430
10	I feel I am wasting my time with PD patients	4.292 $\pm$ 1.407
36	I feel unable to gain control of the situation with PD patients	4.273 $\pm$ 1.356
15	I feel helpless in relation to PD patients	4.272 $\pm$ 1.437
6	I feel vulnerable in PD patients' company	4.261 $\pm$ 1.415
37	I feel intolerant. I have difficulty tolerating PD patients' behavior	4.240 $\pm$ 1.395
32	I feel exploited by PD patients	4.172 $\pm$ 1.520
17	I feel angry toward PD patients	4.117 $\pm$ 1.431
27	I feel powerless in the presence of PD patients	4.111 $\pm$ 1.349
9	I feel uncomfortable or uneasy with PD patients	4.100 $\pm$ 1.320
18	I feel provoked by PD patients' behavior	4.095 $\pm$ 1.140
21	PD patients make me feel irritated	4.094 $\pm$ 1.331
13	I feel resigned about PD patients	4.050 $\pm$ 1.317
2	I feel frustrated with PD patients	3.994 $\pm$ 1.292
12	I feel pessimistic about PD patients	3.900 $\pm$ 1.214
8	I feel manipulated or used by PD patients	3.833 $\pm$ 1.384
26	I feel understanding toward PD patients	3.713 $\pm$ 1.155
34	I feel able to help PD patients	3.567 $\pm$ 1.035
35	I feel interested in PD patients	3.438 $\pm$ 1.310
31	Caring for PD patients makes me feel satisfied and fulfilled	3.061 $\pm$ 1.135
33	I feel patient when caring for PD patients	3.044 $\pm$ 1.525
29	I feel cautious and careful in the presence of PD patients	3.044 $\pm$ 1.331
23	I feel protective toward PD patients	2.977 $\pm$ 1.085
22	I feel warm and caring toward PD patients	2.972 $\pm$ 1.085
5	I feel fondness and affection for PD patients	2.938 $\pm$ 1.173
1	I like PD patients	2.921 $\pm$ 1.013
7	I have a feeling of closeness with PD patients	2.716 $\pm$ 1.178
11	I am excited to work with PD patients	2.655 $\pm$ 1.229
19	I enjoy spending time with PD patients	2.550 $\pm$ 1.074
14	I admire PD patients	1.911 $\pm$ 1.031

Table 2

Confirmatory Factor Analysis of APDQ Five-Factor Model

Item	F1	F2	F3	F4	F5
7: I have a feeling of closeness with PD patients	.71				
5: I feel fondness and affection for PD patients	.75				
19: I enjoy spending time with PD patients	.69				
22: I feel warm and caring toward PD patients	.62				
28: I feel happy and content in PD patient company	.64				
14: I admire PD patients	.71				
11: I am excited to work with PD patients	.77				
1: I like PD patients	.65				
23: I feel protective toward PD patients	.65				
26: I feel understanding toward PD patients	.73				
24: I feel oppressed or dominated by PD patients	.61				
16: I feel frightened of PD patients	.60				
20: Interacting with PD patients makes me shudder	.32				
21: PD patients make me feel irritated	.28				
6: I feel vulnerable in PD patients' company	.80				
3: I feel drained by PD patients		.78			
36: I feel unable to gain control of the situation with PD patients		.91			
17: I feel angry toward PD patients		.89			
9: I feel uncomfortable or uneasy with PD patients		.81			
37: I feel intolerant. I have difficulty tolerating PD patients' behavior		.73			
2: I feel frustrated with PD patients		.75			
30: I feel outmaneuvered by PD patients		.77			
25: I feel that PD patients are alien, other, strange		.80			
15: I feel helpless in relation to PD patients		.82			
32: I feel exploited by PD patients		.78			
13: I feel resigned about PD patients			.85		
27: I feel powerless in the presence of PD patients			.81		
10: I feel I am wasting my time with PD patients				.94	

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Item	F1	F2	F3	F4	F5
8: I feel manipulated or used by PD patients			.82		
12: I feel pessimistic about PD patients			.88		
34: I feel able to help PD patients				.80	
35: I feel interested in PD patients				.86	
31: Caring for PD patients makes me feel satisfied and fulfilled				.86	
29: I feel cautious and careful in the presence of PD patients					.90
33: I feel patient when caring for PD patients					.91

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Table 3

APDQ Factors' Correlation

	Piacere	Sicurezza	Accettazione	Risolutezza	Entusiasmo
Piacere	1				
Sicurezza	.145	1			
Accettazione	.222**	.914**	1		
Risolutezza	.298**	.752**	.757**	1	
Entusiasmo	.150*	.785**	.727**	.657**	1

* $p < .05$.
** $p < .01$.