



Original article

Mental health professionals' attitudes towards mental competency and involuntary commitment in anorexia nervosa: Construction, validation and results of the ACINOVAN questionnaire



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ARTICLE INFO

Article history:

Received 21 October 2020

Accepted 25 November 2020

Available online 6 September 2022

Keywords:

Attitude of health personnel

Anorexia nervosa

Mental competency

Surveys and questionnaires

Validation study

Involuntary commitment

ABSTRACT

Introduction: Anorexia nervosa is a serious disorder that causes high rates of morbidity and mortality. Involuntary treatments are only legally admissible if the patient is not competent. However, assessing their capacity can be really complex. This implies that the final decision can be influenced by the individual attitudes of the physician.

Objective: To create and empirically validate a questionnaire in Spanish that makes it possible to measure the attitude towards capacity and involuntary commitment and compare between categorical groups.

Methods: The sample consisted of 338 mental health professionals. The items were validated by groups of experts. An exploratory factor analysis and group comparisons were carried out.

Results: Favourable evidence was obtained of a 13-item model consisting of three factors: pro-intervention, lack of competence and chronicity. Professionals tend to believe in the lack of capacity and the need for involuntary interventions, as well as differential suitability due to chronicity. Support prior to involuntary interventions was significantly related to the pro-intervention and absence of capacity factors, and training in bioethics to chronicity.

Conclusions: The resulting instrument is valid and reliable. Its use can be useful to professionals, patients and society.

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DOI of original article: <https://doi.org/10.1016/j.rcp.2020.11.010>.

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Actitudes de los profesionales de la salud mental ante la capacidad y el internamiento no voluntario en anorexia nerviosa: construcción, validación y resultados del cuestionario ACINOVAN

R E S U M E N

Palabras clave:

Actitud del personal de salud
Anorexia nerviosa
Competencia mental
Encuestas y cuestionarios
Estudio de validación
Internamiento involuntario

Introducción: La anorexia nerviosa es un trastorno grave que causa tasas elevadas de morbilidad y mortalidad. La aplicación de una intervención no voluntaria solo es legalmente admisible si el paciente no es competente. Sin embargo, la evaluación de su capacidad puede ser extremadamente compleja. Ello conlleva que la decisión final pueda verse influida por las actitudes individuales del facultativo.

Objetivo: Crear y validar empíricamente un cuestionario en español que permita medir la actitud hacia la capacidad y el internamiento no voluntario y comparar entre grupos categóricos.

Métodos: Formaron la muestra 338 profesionales de salud mental. Los ítems fueron validados por grupos de expertos. Se realizaron un análisis factorial exploratorio y comparaciones grupales.

Resultados: Se obtuvo un modelo de 13 ítems formado por 3 factores: prointervención, ausencia de capacidad y cronicidad. Los profesionales tienden a creer en la ausencia de capacidad y la necesidad de la intervención no voluntaria, así como en la idoneidad diferencial en virtud de la cronicidad. El respaldo previo a intervenciones involuntarias se relacionó significativamente con los factores prointervención y ausencia de capacidad y la formación en bioética, con la cronicidad.

Conclusiones: El instrumento resultante es válido y fiable. Puede ser útil a profesionales, pacientes y sociedad.

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Introduction

Anorexia nerviosa (AN) is a serious disorder that causes high rates of morbidity, with a prevalence of 1%–4%¹ and a mortality rate of 5.1 per 1,000 person-years.² One of the characteristics of AN is that those who have it often refuse treatment despite the danger that it represents to their health and deny the problem or seem to struggle to grasp their situation.

Thus AN poses an important bioethical dilemma regarding respect for patient autonomy, as resistance to treatment can be understood as a behaviour pattern inherent to the disorder and it is not clear that the decision to refuse it is autonomous. Actions in accordance with the will expressed by the individual with AN can lead to critical illness or even death. If the person is competent and old enough to make their own health-related decisions, this would be nothing more than a manifestation of the primacy of autonomy in patients' rights in Spain³ (Law of Patient Autonomy).

However, assessing the ability of people with AN can be difficult, as they are normally competent to make decisions in all aspects of life apart from body weight. Some studies have examined the ability of AN patients to consent to treatment, with conflicting results.⁴

The rule that specifically regulates involuntary commitment (Art. 763 of Law 1/2000 of Civil Procedure⁵) is vague on its own application, requiring that individuals be “not in a position to decide for themselves”; this seems to leave the

weight of decision-making in this regard the hands of medical personnel.

This means that the final decision regarding pursuit of involuntary treatment may be influenced by the personal attitudes of the responsible health professional towards the capacity of patients with AN and the use of involuntary measures.

However, little is known about these attitudes. One study⁶ surveyed a group of general psychiatrists, child and adolescent psychiatrists and psychiatrists with experience in eating disorders. The survey respondents generally supported the suitability of involuntary treatment of patients with AN and believed that this condition interferes with treatment decision-making and self-care behaviours. In another study,⁷ psychiatrists also generally supported the role of mandatory measures in the treatment of patients with AN. A recent study⁸ measured attitudes towards the use of both formal and informal coercive treatment methods among 254 professionals: psychiatrists, psychologists and nurses, as well as other physicians, therapists and social workers. The results revealed slightly favourable aggregate attitudes towards coercive treatment approaches in general, although data disaggregated by profession or type of coercion were not provided, meaning that these results should be interpreted with caution.

In Spain, to the knowledge of the authors of this study, there is no research on attitudes of mental health professionals towards capacity or involuntary commitment in AN.

Table 1 – Sociodemographic characteristics of the participants (n = 338).

Variable	
<i>Profession</i>	
Psychiatrist	134 (39.6)
Psychiatry resident	9 (2.7)
Clinical psychologist	96 (28.4)
Psychology resident	9 (2.7)
General health psychologist	47 (13.9)
Mental health nurse	26 (7.7)
Mental health nursing resident	4 (1.2)
Other	12 (3.6)
Unknown/no response	1 (0.3)
<i>Seniority (years)</i>	
Range	10.58 ± 10.7 49 (1–50)
Up to 10 years, inclusive	112 (33.1)
More than 10 years	222 (65.7)
Unknown/no response	4 (1.2)
<i>Sex</i>	
Female	237 (70.1)
Male	98 (29.0)
Unknown/no response	3 (0.9)
<i>Experience in eating disorders</i>	
Yes	220 (65.1)
No	117 (34.6)
Unknown/no response	1 (0.3)
<i>Bioethics training</i>	
Yes	127 (37.6)
No	211 (62.4)
<i>Has ever supported a request for commitment</i>	
Yes	167 (49.4)
No	169 (50.0)
Unknown/no response	2 (0.6)

Values express n (%), mean ± standard deviation or range (minimum–maximum).

The objective of this study was to develop and validate a useful questionnaire to evaluate attitudes of mental health personnel towards capacity and involuntary commitment in patients 18 years of age or older with AN, analyse the psychometric properties thereof and assess the results.

Methods

Participants

The number of responses obtained was 338. Table 1 shows the sociodemographic characteristics of the sample.

Instrument

To address the main objective of the study, a specifically designed questionnaire was constructed and validated, based on the information previously obtained through qualitative techniques (a literature review and in-depth interviews). In particular, the questionnaire used by Tan et al. was taken as reference.⁶

An 11-point (0–10) scale was chosen, as it minimises categorisation effects and improves data analysis and reliability.⁹ In addition, as the number of response alternatives increases, the use of the middle or neutral point decreases.¹⁰

The questionnaire format and items were developed through an iterative process of clarification and simplification. An initial version of the questionnaire was designed and its content validity was tested on a small number of experts, ethicists and volunteer physicians, in a four-step process.

Step one: A debriefing was implemented¹¹ by presenting a document with the initial items to three psychiatrists (two of whom were bioethics experts). On the basis of their comments, the items were amended with new wording or removed if they received negative evaluations or comments.

Step two: The amended version was presented to three new volunteers: a psychiatrist, a male clinical psychologist and a female clinical psychologist, all of whom were equally representative of the target population. Hard copies were left with the two clinical psychologists and collected on a later date. A concurrent cognitive interview was conducted with the psychiatrist¹² in the presence of an interviewer. Based on the data from the three experts above, a new version was prepared.

Step three: A retrospective cognitive interview¹² was then conducted with a female clinical psychologist.

Step four: After this interview, the questionnaire was formulated as it would be presented for quantitative validation, reduced to six sociodemographic items and 17 items related to study attitude (Appendix B Annex 1).

Care was taken in preparing the scale to dispense with the pilot test before presenting it to the final sample, following that methodological alternative.

Procedure

The target population was made up of mental health professionals from the Spanish health system, including psychiatrists, psychiatry residents, clinical psychologists, general health psychologists, psychology residents, mental health nurses and mental health nursing residents.

The ministries of health of all the Autonomous Communities of Spain were asked for the addresses of the management departments at the hospitals that treated patients for AN. With the addresses from the ministries of health that responded to the request, an invitation was sent to said departments so that they could circulate it among the professionals working there. In addition, the cooperation of all professional associations of psychologists, physicians and nurses in Spain, Spanish universities and private hospital groups operating in Spain was solicited. The institutions that actually filed the petition are unknown. In addition, other forms of access to the target population with less of a broad reach, such as elements of convenience and snowball sampling, were attempted.

In October 2019, a request for collaboration was sent out. It included a link to the corresponding website leading to the form, with general information on the study and ethics standards. In January 2020, a reminder to participate was issued. The questionnaire was closed on 31 March 2020.

Statistical analysis

The results were analysed using the IBM SPSS Statistics software package, version 24, and the Jamovi software program,

Table 2 – Descriptive statistics for items.

	N	Range	Minimum	Maximum	Mean	Standard deviation
Q7	337	10	0	10	7.34	2.438
Q8	335	10	0	10	6.56	2.925
Q9*	336	10	0	10	5.08	2.878
Q11*	335	10	0	10	6.12	2.710
Q12	335	10	0	10	4.10	2.720
Q13	335	10	0	10	4.69	2.879
Q14	332	10	0	10	6.09	2.832
Q15	337	10	0	10	4.03	2.817
Q16	309	10	0	10	7.31	2.407
Q17*	308	10	0	10	7.70	2.244
Q18	308	10	0	10	7.71	2.019
Q19	308	10	0	10	8.11	1.760
Q20	309	10	0	10	7.17	2.528
Q21	289	10	0	10	6.45	2.823
Q22*	290	10	0	10	6.55	2.577
Q23	286	10	0	10	6.30	2.782
Q24	287	10	0	10	3.52	2.525

* Inverted items; their scores were reversed.

version 1.1.9.0. First, data correction was reviewed and data cleaning was performed. To examine construct validity, an exploratory factor analysis (EFA) of the items was performed. This resulted in the selection of the 13 items on the definitive scale.

Before the factor analysis was carried out, it was verified that the correlation matrix fulfilled the criteria for being factored. This was done using Bartlett's test of sphericity. In addition, the Kaiser-Meyer-Olkin (KMO) test was used to confirm the measure of sampling adequacy¹³ which compares observed correlations to partial correlations between variables.

As a measure of extraction and rotation for the EFA, the SPSS software program and the unweighted least-squares mode of extraction with Oblimin rotation for a delta equal to 0 were used.

The "pairwise deletion" option in SPSS was used to process missing values, since this option made it possible to leverage the full set of available data. Non-responses were taken to reflect fatigue from completing a lengthy task, and no indication of advising another treatment was seen. It must be noted that there was a confirmed pattern of questionnaire abandonment with each section change (corresponding to a change in tab on the electronic test). This pattern backed the notion of questionnaire abandonment being rooted in fatigue, lack of motivation to continue or the belief that the end of the test had been reached, rather than any reason that might obscure bias in the results. Therefore, a decision was made to count the responses of the participants who had at least completed the clinical vignette in order to lose as few cases as possible.

The decision around the number of factors was made after considering and comparing multiple criteria (parallel analysis, sediment graph, eigenvalues greater than unity and a minimum of three items per factor), in all cases considering a substantive interpretation of the solution found, in pursuit of a balance between goodness-of-fit criteria, parsimony and interpretability.

Next, reliability was analysed by means of analysis of the homogeneity or internal consistency of the question-

naire using the corresponding Cronbach's alpha coefficient and McDonald's omega coefficient, yielding a measure of the strength of the relationship between all items in each dimension.

Construct validity was evaluated by means of cross-correlation of scores for individual factors using Spearman's correlation coefficient.

Tests of normality (Kolmogorov-Smirnov and Shapiro-Wilk) were used prior to the Mann-Whitney/Kruskal-Wallis tests to determine differences in distribution of groups for all categories in each factor. A descriptive analysis of the responses obtained was performed to yield information broken down by the groups that made up each sociodemographic variable.

Results

Descriptive statistics

Table 2 compiles the range and minimum and maximum values obtained on the initial items in the questionnaire, as well as mean and standard deviation statistics.

Mean values ranged from 3.52 (item Q24) to 8.11 (item Q19), while standard deviation values were ≤ 2.925 .

Exploratory factor analysis

The value for the measure of sampling adequacy, KMO = 0.905; Bartlett's test of sphericity, $\chi^2(136) = 1,959.356$ ($p < 0.001$); and the determinant of the correlation matrix (0.001) provided information on the viability of reducing the dimensionality of the data, carried out using the "unweighted least squares" extraction method, and the rotation method applied was Oblimin with a delta equal to 0. A value of 0.40 was taken as a selection criterion for factorial loads.¹⁴

Table 3 presents the rotation which converged on 16 iterations, while Table 4 shows the scores for the diagonal of the anti-image correlation matrix.

Table 3 – Rotated factorial matrix.

	Factor			
	1	2	3	4
Q7			0.418	
Q8	0.618			
Q9	0.731			
Q11	0.409			
Q12		0.434		
Q13	0.546			
Q14	0.570			
Q15		0.676		
Q16			0.472	
Q17			0.461	
Q18				
Q19			0.436	
Q20			0.935	
Q21				0.496
Q22				0.598
Q23				
Q24		0.530		
Eigenvalues	60.496	10.520	10.245	10.065

Table 4 – Diagonal of anti-image correlation matrix.

Item	Anti-image correlation
Q7	0.923
Q8	0.909
Q9	0.880
Q11	0.933
Q12	0.896
Q13	0.927
Q14	0.921
Q15	0.876
Q16	0.924
Q17	0.851
Q18	0.764
Q19	0.926
Q20	0.881
Q21	0.936
Q22	0.819
Q23	0.952
Q24	0.584

Based on the results of the analysis, the most substantive and parsimonious solution was deemed the one that eliminated items Q21 and Q22 (as they did not achieve a minimum of three items and lacked substantive significance) and items Q18 and Q23 (as they did not load a minimum of 0.4 in any of the factors). The remaining items were kept at three factors, which accounted for 45.8% of variance. Factor 1, “Pro-intervention”, included five items (Q8, Q9, Q11, Q13 and Q14) referring to favourable views on involuntary intervention. A high score on the factor would indicate a tendency towards positively appraising implementation of involuntary interventions in patients with AN. Factor 2, “Chronicity”, included three items (Q12, Q15 and Q24) that measured the presence of differences by virtue of having suffered from the disorder for a longer or shorter period of time with a view to deciding upon involuntary intervention. A higher score on this factor showed a stronger tendency to deem involuntary intervention more suitable in chronically ill patients. A lower score, on the other hand, indicated a favourable attitude towards finding involuntary intervention more suitable in early-disease patients.

Table 5 – Results of descriptive analysis by dimensions.

	Statistic	Standard error
Pro-intervention		
Mean	5.72	0.127
95% confidence interval of the mean		
Lower limit	5.47	
Upper limit	5.97	
Difference	10	
Lack of capacity		
Mean	7.52	0.095
95% confidence interval of the mean		
Lower limit	7.33	
Upper limit	7.71	
Difference	9	
Chronicity		
Mean	3.85	0.117
95% confidence interval of the mean		
Lower limit	3.62	
Upper limit	4.09	
Difference	9	

Factor 3 “Lack of capacity” included five items (Q7, Q16, Q17, Q19 and Q20) and comprised lack of authenticity, decision-making capacity and self-care in patients with AN. A higher score on this factor yielded samples of a negative outlook on patient capacity. Thus the three dimensions established were substantial, had particular values >1 and accounted for 45.8% of variance.

The resulting questionnaire following the respective factor analyses was designated the *Cuestionario de Actitudes hacia la Capacidad y el Internamiento No Voluntario en Anorexia Nerviosa* [Questionnaire on Attitudes Towards Capacity and Involuntary Commitment in Anorexia Nerviosa] (ACINOVAN) (Appendix B Annex 2).

Reliability

Once the process of reducing and simplifying the questionnaire was completed, the reliability of the factors identified was evaluated by means of analysis of internal consistency with estimation of Cronbach’s alpha coefficient and McDonald’s omega coefficient. For the pro-intervention factor, the values obtained were $\alpha = 0.862$ and $\Omega = 0.865$. For the lack-of-capacity factor, they were $\alpha = 0.778$ and $\Omega = 0.785$. Finally, the chronicity factor yielded values of $\alpha = 0.591$ and $\Omega = 0.660$.

Descriptive analysis of questionnaire dimensions

To compare attitudes between groups, the scale based on the factor analysis was used instead of the factorial scale in its own right given its simplicity and the fact that the reliability of the factorial score was usually not much greater.¹⁵ To this end, the simple arithmetic mean of the items selected as definitive was calculated for the factors obtained. Table 5 presents the range, mean and 95% confidence interval for each subscale.

There was a favourable attitude towards involuntary intervention, and the value of the scale for the pro-intervention factor was >5 (5.72). Belief in a lack of capacity was marked (7.52). Regarding the chronicity factor, chronically ill patients

were considered less suited to involuntary intervention than early-disease patients. This factor took a value of 3.85.

Relationship between factors

The results showed a strong, significant positive correlation between responses by survey respondents on the pro-intervention factor and the lack-of-capacity factor (Spearman's $\rho=0.656$; $p<0.001$). There was also a moderate, significant positive correlation between the pro-intervention and chronicity factors ($\rho=0.402$; $p<0.001$). Similarly, a weak, significant positive correlation was found between the lack of capacity and chronicity factors ($\rho=0.258$; $p<0.001$).

Differences between categories within each sociodemographic variable

Rejection of the null hypothesis in the normality tests (Kolmogorov-Smirnov and Shapiro-Wilk) in many of the distributions rendered the use of non-parametric tests advisable.

The Mann-Whitney/Kruskal-Wallis tests, with a level of significance of 0.05 for the determination of differences between the distributions of the groups that made up each category in the three factors, yielded a result of retention of the null hypothesis of distribution equality in most cases. The exception was in the category of a history of support for decision-making or a request for involuntary commitment, with significant differences for the pro-intervention and lack-of-capacity factors. Similarly, significant differences were seen in the category of bioethics training for the chronicity factor. [Table 6](#) shows mean values by factor and category.

Discussion

The results obtained backed the reliability and validity of the ACINOVAN questionnaire in evaluating attitudes of mental health professionals towards involuntary commitment as well as decision-making capacity and adoption of self-care measures in patients with AN 18 years of age or older. The pro-intervention and lack-of-capacity factors offered high reliability. The chronicity factor offered reliability that was less satisfactory for individual decision-making, but sufficient for group decision-making.¹⁶

Regarding sample size, even when there was no criterion or definitive standard, the requirements found in the literature were met. For the EFA, the minimum recommendation was at least 200 subjects.¹⁷

It was not possible to rigorously determine the instrument's convergent validity, understood as the degree of agreement between multiple measures of the same construct obtained using different methods, as there is no other tool that measures it. For the same reason, it was not possible to analyse discriminatory validity, understood as the degree of differentiation between different constructs, as no studies have validated scales or questionnaires enabling any comparison to be made.

Correlations between factors seemed to support the scale's construct validity. It seems consistent that the people who defended lack of capacity in patients tended to defend the

need for involuntary treatment in the patient's best interest. Similarly, the correlation between the pro-intervention and chronicity factors could be anticipated, since mental health professionals who supported involuntary intervention measures realised that this has weaker prospects for long-term success in psychiatric disease in chronically ill patients, representing a significant qualitative difference from early-disease patients. By similar reasoning, a weak correlation between lack of capacity and chronicity is reasonable. Normally, chronically ill patients are considered to have greater capacity and high "awareness of living with their disease".¹⁸

In addition to the above, the factor analysis detected the subtle difference that the pro-intervention and lack-of-capacity factors entailed. These being elements that must move in the same direction, it was to be expected that they would be joined in a single factor (which would not be a problem — in fact, an objective criterion would offer the possibility of presenting that solution with methodological rigour) or, in the worst case, the items might be mixed in two factors, but without allowing for a distinction between attitude towards intervention and attitude towards capacity. Belief in a lack of capacity need not necessarily entail adherence to a favourable attitude towards involuntary intervention. In effect, that nuance was partially reflected in the chronicity factor, which seemed to grade perceived suitability of commitment based on the chronicity of the disorder.

Having an instrument that measures attitudes towards involuntary commitment and capacity in patients with AN is important from different points of view.

From the patient's perspective, it is worth considering whether suitable use of this information could be made within a framework of free choice of a specialist. This refers to choosing to see one professional or another based on ACINOVAN results, much as professionals are selected based on their adherence to a particular current in psychotherapy.

Professionals themselves can self-calibrate based on their position on the scale, which must undoubtedly provide them with points to ponder in relation to their professional performance.

It would be advisable to extend this to professionals who, despite not belonging to the field of mental health, end up making commitment decisions involving patients with AN.

It can also be an element in the evaluation of outcomes of bioethics training efforts. The instrument attested to differing attitudes between professionals with this training and professionals without it in relation to the temporal course of the disorder. The unknown of directionality has yet to be resolved. Bioethics training may offer different perspectives when weighing the best option. However, certain personal characteristics of mental health professionals may also guide them in pursuing the bioethics training that they feel is necessary.

Summary of main results

Survey respondents in this study showed a positive attitude towards a lack of capacity in patients with AN to take charge of their care and make decisions relating to their treatment. This was consistent with findings of prior international studies.⁶

Table 6 – Mean values by factor and category.

	Pro-intervention Mean	Lack of capacity Mean	Chronicity Mean
<i>Profession</i>			
Psychiatrist	5.98	7.68	3.72
Psychiatry resident	5.24	7.23	3.71
Clinical psychologist	5.65	7.23	3.64
Psychology resident	4.96	6.67	3.21
General health psychologist	5.87	7.78	4.86
Mental health nursing	5.21	7.59	3.84
Mental health nursing resident	4.50	7.30	4.17
Other	5.27	7.98	3.21
<i>Sex</i>			
Female	5.78	7.55	3.90
Male	5.57	7.46	3.75
<i>Seniority</i>			
≤10 years	5.79	7.56	3.86
>10 years	5.52	7.42	3.85
<i>Experience in eating disorders</i>			
Yes	5.83	7.56	3.85
No	5.49	7.45	3.86
<i>Bioethics training</i>			
Yes	5.50	7.37	3.50
No	5.85	7.61	4.07
<i>Has ever supported a request for commitment</i>			
Yes	6.01	7.76	3.78
No	5.44	7.27	3.94

Similarly, interviewees showed a favourable attitude towards adopting involuntary measures to safeguard the health of patients with AN. In this regard, too, the results were consistent with prior work in this field.⁶⁻⁸

The chronicity factor as an element to take into account in ethical decision-making had already been documented in the literature,¹⁸ but not subjected to quantitative verification. Effectively, a consensus was seen towards greater suitability of involuntary treatment in early-disease patients. The fact that there were significant differences between professionals based on their bioethics training reflected the importance of exposure to that discipline. Reflecting on bioethics involves adopting an attitude of empathy with the patient going far beyond rational application of a few principles.

Professionals who had ever supported an involuntary intervention were found to feel significantly more favourably towards involuntary intervention; they also showed a stronger tendency to believe that patients with AN lack capacity. This information may seem redundant. However, again, it would be interesting to clarify causality. It is consistent that whoever advocates most strongly for intervention would also be more likely to have requested or supported it at some point (ethical assessment of unequal employment among professionals would be another matter). Yet, sight must not be lost of the possibility that attitudes result from actions, habituation and mechanisms to reduce cognitive dissonance. Prior involvement in a care situation that led to involuntary intervention may give rise to adherence to the idea that it was needed. This would reduce the conflict that actions of this sort entail.

Limitations

This study had several limitations. The response rate was low; this is typical among health personnel. Whether any element might have affected the representativeness of the sample is unknown. Among professionals who could legally implement involuntary commitment, numbers of psychiatrists and clinical psychologists were satisfactory. However, the group of psychiatry residents did not attain participation numbers that would have been desirable. This represented a handicap, since this group of professionals prescribes involuntary admissions.

No rigorous evidence was offered as to the questionnaire's convergent validity, with measurement instruments evaluating similar constructs, or its discriminant validity, with instruments measuring constructs hypothetically related to attitude.

The chronicity factor yielded not-entirely-satisfactory internal consistency.

Directionality between support for involuntary interventions and attitudes measured by the ACINOVAN questionnaire could not be detected. A longitudinal study taking into account attitudes before and after having supported or implemented an involuntary action could be an interesting avenue of research.

Finally, the ACINOVAN questionnaire was limited to patients 18 years of age or older due to legal presumption of capacity, which greatly simplified construction and reflection. Developing an instrument with a focus on adolescents and children would seem to be an obvious avenue of research, if a much more complex one.

Conflicts of interest

The authors declare that they have no conflicts of interest.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.rcpeng.2020.11.009>.

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