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Cross-national measurement invariance of the Perseverative Thinking Questionnaire for clinical psychology professionals and trainees

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Abstract | **Introduction:** Clinical psychology professionals and trainees face significant occupational stress, which can lead to repetitive negative thinking (RNT). The Perseverative Thinking Questionnaire for Clinical Psychology Trainees (PTQ-CPT) measures RNT in this population. This study aimed to examine the psychometric properties and cross-national measurement invariance of the PTQ-CPT in three Latin American countries. **Method:** The sample comprised 475 participants from Colombia (n = 101), Mexico (n = 253), and Peru (n = 121). The participants were clinical psychology professionals and trainees. Data were collected via an online survey. The PTQ-CPT, along with measurements of depressive symptoms, anxiety symptoms, and confidence in clinical skills, were administered. Confirmatory factor analysis, measurement invariance testing, a graded response model, and correlational analyses were conducted. **Results:** A unidimensional structure with a pair of correlated errors provided the best fit for the PTQ-CPT. Metric invariance across countries was confirmed, while scalar invariance was supported by the pragmatic criterion (difference in CFI < .01) but not by the strict criterion (difference in χ^2). The graded response model showed that item 5 had the greatest informative capacity. PTQ-CPT scores correlated positively with depressive (r = .45) and anxiety (r = .56) symptoms, and negatively with confidence in clinical skills (r = -.58). **Conclusions:** The PTQ-CPT demonstrated adequate psychometric properties and cross-national measurement invariance. It is a reliable and valid tool for assessing RNT in clinical psychology professionals and trainees across Colombia, Mexico, and Peru. These findings support the use of the PTQ-CPT in cross-cultural research and clinical practice.

Keywords: Repetitive negative thinking, health personnel, health science trainees, psychometric analysis, rumination, worry

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Invarianza de medición transnacional del Cuestionario de Pensamiento Perseverativo para profesionales y estudiantes de psicología clínica

Resumen | **Introducción:** Los profesionales y aprendices de psicología clínica se enfrentan a un estrés laboral importante, que puede conducir a pensamiento negativo repetitivo (PNR). El Cuestionario de Pensamiento Perseverativo para Estudiantes de Psicología Clínica (PTQ-CPT) mide PNR en esta población. Este estudio tuvo como objetivo examinar las propie-

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dades psicométricas y la invarianza de medición transnacional del PTQ-CPT en tres países de América Latina. **Método:** La muestra estuvo compuesta por 475 participantes de Colombia (n = 101), México (n = 253) y Perú (n = 121). Los participantes fueron profesionales y estudiantes de psicología clínica. Los datos se recopilaron por medio de una encuesta en línea. Se administró el PTQ-CPT, junto con medidas de síntomas depresivos, síntomas de ansiedad y confianza en las habilidades clínicas. Se realizaron análisis factorial confirmatorio, pruebas de invarianza de medición, un modelo de respuesta gradual y análisis correlacionales. **Resultados:** Una estructura unidimensional con un par de errores correlacionados proporcionó el mejor ajuste para el PTQ-CPT. Se confirmó la invariancia métrica entre países, mientras que la invariancia escalar fue respaldada por el criterio pragmático (diferencia en CFI < .01), pero no por el criterio estricto (diferencia en χ^2). El modelo de respuesta graduada mostró que el ítem 5 tenía mayor capacidad informativa. Las puntuaciones del PTQ-CPT se correlacionaron positivamente con los síntomas depresivos (r = 0.45) y de ansiedad (r = 0.56), y negativamente con la confianza en las habilidades clínicas (r = -0.58). **Conclusiones:** El PTQ-CPT demostró propiedades psicométricas adecuadas e invarianza de medición transnacional. Es una herramienta confiable y válida para evaluar RNT en profesionales y estudiantes de psicología clínica en Colombia, México y Perú. Estos hallazgos respaldan el uso del PTQ-CPT en la investigación transcultural y la práctica clínica.

Palabras clave: Pensamiento negativo repetitivo, personal de salud, estudiantes de ciencias de la salud, análisis psicométrico, rumia, preocupación

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Psychological care requires psychologists to develop clinical skills and competencies to help clients manage their suffering. This exposure to others' suffering can lead both psychologists in training and graduates to face stressful situations due to their work (Renault et al., 2023), which can result in increased depression, emotional exhaustion, and anxiety (García-Torres et al., 2021). Psychologists are among the mental health professionals most affected by stress, exhibiting physical symptoms, particularly in response to criticism of their work and therapeutic decisions (Lara Salazar et al., 2023). Therefore, it is crucial to study the various ways in which these individuals cope with the inherent stress of their profession.

Training in clinical psychology requires rigourous preparation, both practically and theoretically, over several years. Students are exposed to numerous stressors, beginning with clinical work, which involves facing clients' suffering, dealing with complex cases, and the continuous effort to establish therapeutic alliances (Dereix-Calonge et al., 2020). Accordingly, it has been observed that clinical psychology trainees usually show an increase in emotional symptoms and distress (Ruiz et al., 2019). This training path was further complicated by the COVID-19 pandemic, presenting additional challenges for clinical psychology, from leading mental health efforts in response to a multidimensional stressor to exploring new research directions (Gruber et al., 2021).

Repetitive negative thinking (RNT) is particularly significant for clinical psychologists and other mental health professionals due to its potential impact on their well-being and professional effectiveness. In the clinical context, RNT can manifest as persistent doubts and worries about one's competence, decisions, and intervention outcomes, leading to increased stress and burnout. Research has shown that high levels of RNT are associated with greater emotional exhaustion and lower job satisfaction (Dereix-Calonge et al., 2020; Pappa et al., 2020). This is especially concerning for those responsible for others' mental health, as their own mental health can directly affect their ability to provide high-quality care (Pirelli et al., 2020). Furthermore, RNT may impair cognitive functioning and decision-making (Mennies et al., 2021), reducing efficacy in clinical practice. Therefore, addressing RNT in mental health professionals is crucial not only for their health but also for maintaining the standards of care they provide to clients. Interventions that reduce RNT, such as cognitive-behavioural strategies and mindfulness-based practices, can help improve both well-being and professional performance (Dereix-Calonge et al., 2019a; Kriakous et al., 2021).

RNT is considered a transdiagnostic process because it is a common risk factor for emotional disorders, such as anxiety and depression (González Pando et al., 2018). It might also account for the high rate of comorbidity among different disorders, allowing for personalised interventions that have demonstrated effectiveness in various studies (Carmiol Yalico & Chinchilla Fonseca, 2024; Ramírez-Cruz et al., 2023). However, evidence is lacking in the populations of professional psychologists and those in training.

Given its importance, it is crucial to design psychometrically sound measures of RNT. The Perseverative Thinking Questionnaire (PTQ) was originally developed by Ehring et al. (2011) to evaluate RNT as averaged across contexts, with a focus on the process rather than the content of thoughts. The PTQ has demonstrated good psychometric properties and has been widely used in clinical and research settings. Adaptations of the PTQ have been made to fit different cultural contexts. Specifically, in Spanish-speaking countries, it has been studied in Colombia (Ruiz et al., 2018; Vargas-Nieto et al., 2022) and Peru (Valencia, 2020), showing good reliability and validity in these populations.

Along the same lines, the PTQ-Clinical Psychology Trainees (PTQ-CPT; Dereix-Calonge et al., 2019b) was developed to specifically measure RNT in clinical psychology students. The PTQ-CPT adapted the items and instructions of the PTQ to resemble the unique challenges

students face in their clinical practice. The number of items was reduced from 15 to 9. This adaptation aims to provide a reliable and valid tool for understanding and addressing RNT in both clinical psychology students and licensed clinical psychologists, thereby contributing to improved mental health and professional development in these groups. In the validation study, the PTQ-CPT demonstrated content validity, excellent internal consistency, and a one-factor structure. Two subsequent studies have demonstrated that the PTQ-CPT is a promising tool to measure RNT in clinical psychology trainees. On the one hand, in a longitudinal study, the PTQ-CPT scores demonstrated a better ability than the PTQ in predicting the increase of emotional symptoms in clinical psychology trainees (Dereix-Calonge et al., 2020). On the other hand, the PTQ-CPT scores mediated the effect of an intervention based on acceptance and commitment therapy in reducing the emotional symptoms of clinical psychology trainees (Dereix-Calonge et al., 2019a).

Although the PTQ-CPT is a promising tool, to our knowledge, there has not been a comprehensive psychometric reexamination of this measure since the study by Dereix-Calonge et al. (2019b). Furthermore, it is unclear whether the PTQ-CPT functions similarly across different countries, which limits its use in cross-cultural research, especially in countries that have historical similarities and that currently experience a similar socioeconomic, political and traffic reality, which indirectly affects the mental health of the population of these countries (Hurtado & Doria, 2020). Therefore, the objective of the present study was to examine the factorial invariance of the PTQ-CPT among individuals involved in clinical psychology, both intern students and licensed psychologists, in three Latin American countries. This study is an instrumental type (Ato et al., 2013) focused on the PTQ-CPT, which measures RNT in the specific context of clinical practice, rather than the general PTQ.

Method

Participants

The current study was based on a non-probabilistic sample. The sample size was calculated using a Monte Carlo simulation based on parameters estimated in a previous study (Dereix-Calonge et al., 2019b). The simulation indicated that at least 100 participants per group were needed to analyse measurement invariance across countries. The final sample consisted of 475 participants: 253 (53.3%) from Mexico, 121 (25.5%) from Peru, and 101 (21.3%) from Colombia. Of these, 363 (76.4%) were women, and 112 (23.6%) were men. Additionally, 24.4% were undergraduate clinical psychology students, while the remaining 75.6% were licensed professionals. Regarding the work environment, 84% were involved in clinical interventions, 42.2% in evaluation activities, 41.2% in health promotion and prevention, and 26.5% in triage and counseling (note that these categories are not mutually exclusive). Moreover, 67.4% of respondents conducted their clinical practice in the private sector, 17.6% in the public sector, and 14.9% worked in both sectors. Regarding weekly clinical supervision hours, 43.8% received no supervision, 41.7% received 0 to 2 hours, 9.3% received 3 to 5 hours, and 5.3% received more than 5 hours of supervision. All participants met the inclusion criteria of being clinical psychology trainees or practitioners living in Peru, Mexico, or Colombia.

Measures

Perseverative Thinking Questionnaire for Clinical Psychology Training (PTQ-CPT; 2019; Dereix-Calonge et al., 2019b). This is an adaptation of the PTQ, a questionnaire that measures perseverative thinking (Ehring et al., 2011). The PTQ-CPT comprises nine items that measure perseverative thinking in clinical psychology trainees, with response options ranging from 0 to 4 (from "not at all" to "almost always"). It has an internal consistency (Cronbach's alpha) of .93 and a unifactorial structure, showing positive correlations with the PTQ, experiential avoidance, emotional symptoms, and values obstruction, as well as medium negative correlations with life satisfaction and values progress. For this study, item 5 was modified from "I get stuck in my worries about clinical practice and I cannot concentrate on my studies" to replace "studies" with "activities." This change was conducted to adapt the PTQ-CPT for use in clinical psychologists, not just trainees.

Patient Health Questionnaire – 2 (Kroenke et al., 2003). This instrument is a brief version of the PHQ-9, consisting of two items that measure key components of depressive symptoms experienced in the last two weeks, with response options on a Likert scale ranging from 0 to 3 (from "not at all" to "almost every day"). It has demonstrated an adequate internal consistency coefficient in Colombian (ω = .89), Mexican (ω = .87), and Peruvian (ω = .86) samples, as well as evidence of measurement invariance across these countries (Caycho-Rodríguez et al., 2024). The PHQ-2 has demonstrated convergent validity and high sensitivity for detecting individuals with depression.

Generalised Anxiety Disorder Scale – 2 (Kroenke et al., 2007). This is a shortened version of the GAD-7, consisting of two items that evaluate the main anxiety symptoms of the last two weeks. Each item has four Likert-type response options (from "not at all" to "almost every day"), with scores ranging from 0 to 3 per item. It has shown an acceptable internal consistency coefficient in Colombian (ω = .88), Mexican (ω = .87), and Peruvian (ω = .87) samples. Caycho-Rodríguez et al. (2024) showed that the GAD-2 demonstrated measurement invariance across these countries. The GAD-2 has shown convergent validity and high sensitivity for detecting individuals suffering from anxiety disorders.

Ad Hoc Question of Confidence in Clinical Skills. This ad hoc measure was developed for the present study. It assesses the confidence participants feel regarding their clinical skills as psychologists or psychology students, with response options ranging from "not at all sure" to "totally sure," scored from 0 to 10.

Procedure

Data collection was conducted via a digital survey using Google Forms. Coordination with associations, institutions, teachers, and students from Peru, Mexico, and Colombia facilitated the sharing of the form through social networks. Data were collected from March to May 2022, ceasing once at least 100 participants per group had been reached. The form began with an informed consent section that explained the research objectives, the voluntary nature of participation, and anonymity. The project was reviewed and approved by the ethics committee and the Research Directorate of the School of Psychology at the Universidad Autónoma del Perú, on June 26, 2023.

Data analysis

Descriptive statistics were first examined at the item level. A confirmatory factor analysis (CFA) was then conducted using a robust variant of the maximum likelihood method (MLR). This approach is appropriate when there are at least five response options, as is the case here (Rhemtulla et al., 2012). The model fit was evaluated using the following criteria (good fit values are indicated in parentheses; Hu & Bentler, 1999): Comparative Fit Index (CFI > .95), Tucker-Lewis Index (TLI > .95), Root-Mean-Square Error of Approximation (RMSEA < .06), and Standardised Root-Mean-Square Residual (SRMR < .08). Robust versions of the CFI, TLI, and RMSEA (Brosseau-Liard et al., 2012; Brosseau-Liard & Savalei, 2014) were also calculated. If a good fit was not achieved, modification indices were examined separately for each country. From the final factor model, reliability was assessed using the internal consistency coefficient omega (ω).

Following the development of the final model, measurement invariance was assessed through a multigroup CFA. Specifically, restrictions of equality for factor loadings (metric invariance) and intercepts (scalar invariance) were added sequentially. Invariance was evaluated using a strict criterion ($\Delta\chi^2$) and a pragmatic criterion (ΔRobust CFI). According to the strict criterion, the fit of the more restricted model should not be significantly different from that of the less restricted model. For the pragmatic criterion, invariance was considered met if the worsening of the Robust CFI from one model to another was no greater than .01 (Cheung & Rensvold, 2002). Due to the marked imbalance in group sizes, in addition to the traditional analysis, a subsampling procedure described by Yoon and Lai (2018) was also executed, using 10,000 replications.

Next, a graded response model (i.e., a two-parameter model for polytomous items proposed within the framework of item response theory) was examined. Specifically, a discrimination parameter (a) was estimated for each item, along with k-1 difficulty parameters (b), where k is the number of response options. These difficulty parameters indicate the level of the latent variable (θ) at which the probability of selecting a higher response option is 50%. Item information curves were then graphed to show the levels of θ at which each item has the greatest informative capacity (or reliability; Furr, 2022).

Finally, Pearson correlations were examined between PTQ-CPT scores and the following variables: depressive symptomatology, anxiety symptomatology, and confidence in clinical skills. All analyses were performed using R (version 4.3.0) with the lavaan (version 0.6-16), semTools (version 0.5-6), and mirt (version 1.39) packages.

Results

Descriptive statistics at the item level

Most items showed average scores of around 1 or 2. The item with the lowest average score was item 9 ("My insecurity about clinical practice absorbs all my attention"), while item 1 had the highest average score ("My doubts about clinical practice come to my mind constantly"). Table 1 provides detailed descriptive statistics for each PTQ-CPT item.

Table 1. Item-level descriptive statistics of the PTQ-CPT

Item	*M*	*SD*	g^1	g^2	Response options (%)				
					0	1	2	3	4
1. Mis dudas sobre la práctica clínica aparecen constantemente en mi mente. [My doubts about the clinical practice come to my mind constantly]	1.98	0.90	0.04	-0.07	5	23	47	21	5
2. No puedo dejar de preocuparme por mi práctica clínica. [I cannot stop worrying about my clinical practice]	1.67	1.07	0.31	-0.62	13	36	28	18	5
3. No puedo centrarme en mis tareas cuando me pongo a pensar en la práctica clínica. [I cannot focus on my tasks when I start thinking about the clinical practice]	0.95	0.97	0.93	0.44	39	36	18	5	2
4. Mis pensamientos en torno a la práctica clínica son repetitivos. [My thoughts about the clinical practice are repetitive]	1.28	1.07	0.56	-0.35	27	35	25	10	3
5. Me quedo atascado en mis preocupaciones acerca de la práctica clínica y no puedo concentrarme en otras actividades. [I get stuck in my worries about the clinical practice and I cannot concentrate on other activities]	0.81	0.91	1.11	0.98	44	37	13	4	1

(*Continued*)

Item	*M*	*SD*	g_1	g_2	Response options (%)				
					0	1	2	3	4
6. Sigo haciéndome las mismas preguntas sobre aspectos de la práctica clínica sin encontrar una respuesta. [I ask myself the same questions about aspects of the clinical practice without finding an answer]	0.97	1.00	0.82	-0.09	40	33	17	8	1
7. Me mantengo pensando sobre la práctica clínica todo el tiempo, incluso en momentos en los que hacerlo no es útil o adecuado. [I keep thinking about the clinical practice all the time, even when doing so is not useful or appropriate]	0.97	1.00	0.82	-0.09	49	31	13	5	2
8. Mis pensamientos repetitivos en torno a la práctica clínica no son de mucha ayuda. [My repetitive thoughts about the clinical practice do not help that much]	1.11	1.15	0.76	-0.38	40	27	19	10	4
9. Mi inseguridad por la práctica clínica absorbe toda mi atención. [My insecurity about the clinical practice absorbs all my attention]	0.79	0.95	1.15	0.82	49	30	15	4	1

Note. Response options are 0 = never, 1 = rarely, 2 = sometimes, 3 = frequently, 4 = almost always. g_1 = skewness, g_2 = kurtosis (zero-centred).

Single-group confirmatory factor analyses

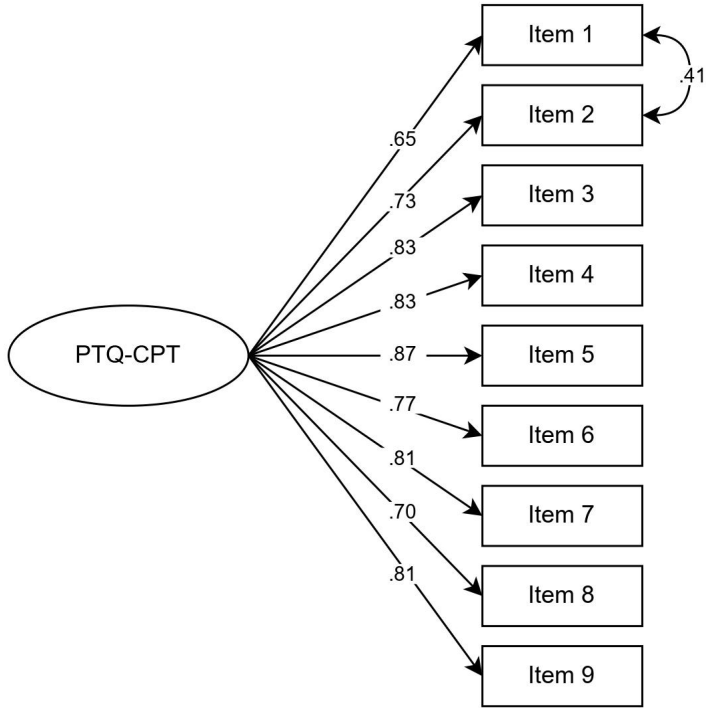
The unidimensional model of the PTQ-CPT was tested with the total sample. The model fit was adequate according to most approximate fit indices, except for RMSEA: $\chi^2(27) = 273.56$, CFI = .95, Robust CFI = .95, TLI = .93, Robust TLI = .95, RMSEA = .10, Robust RMSEA = .11, SRMR = .04. Examination of modification indices for each country revealed the need to allow residual covariation between items 1 and 2 (both related to intrusive thoughts). Adding this parameter substantially improved the model fit: $\chi^2(26) = 234.20$, CFI = .98, Robust CFI = .98, TLI = .97, Robust TLI = .97, RMSEA = .07, Robust RMSEA = .07, SRMR = .03. This model was considered the final model (Figure 1). Internal consistency reliability was excellent (ω = .92).

Measurement invariance between countries

As shown in Table 2, metric invariance across countries was confirmed. However, scalar invariance was only met according to the pragmatic criterion of ΔRobust CFI and not according to the stricter $\Delta\chi^2$ criterion.

Graded response model

Due to the presence of correlated errors (i.e., local dependence) between two items, sensitivity analyses were performed by testing models with one or both items removed. These preliminary analyses indicated that the discrimination parameters (a) were similar across models, suggesting that the impact of potential local dependence was relatively small. Therefore, the model with all items was examined (Table 3). Item 1 showed the lowest discrimination between high and low levels of RNT, while item 5 demonstrated the best discrimination (Table 3). Additionally, item 2 was the "easiest," requiring a lower level of RNT to select the higher response option, compared to item 6, which was the "most difficult" item based on the same criterion. Detailed model estimates are presented in Table 3.



Note. These values were estimated from a confirmatory factor analysis with a robust maximum likelihood method (MLR).
Figure 1. Standardised factor loadings of the PTQ-CPT

Based on the graded response model estimates, item information curves were constructed for each item. As shown in Figure 2, item 5 had the greatest informative capacity, particularly at higher levels of RNT. Other items exhibited similar patterns, with item 2 and, especially, item 1 providing higher-quality measurements at the lower end of the construct distribution (Figure 2).

Table 2. Measurement invariance of the PTQ-CPT across Colombia, Mexico, and Peru

Model	χ^2	*df*	*p*	Robust CFI	$\Delta\chi^2$	Δdf	*p*	ΔCFI
Traditional approach								
1. Configural	163.28	78	<.001	.97				
2. Metric	179.68	94	<.001	.97	14.46	16	.565	.001
3. Scalar	214.63	110	<.001	.96	35.31	16	.004	-.007
Yoon and Lai's (2018) approach								
1. Configural	136.71	78	<.001	.97				
2. Metric	153.15	94	<.001	.97	15.52	16	.487	0
3. Scalar	180.79	110	<.001	.96	27.77	16	.034	-.006

Evidence of validity concerning the association with other variables

As expected, PTQ-CPT scores showed moderate to high positive correlations with depressive symptoms (r = .45, 95% CI: [.37, .53]) and anxiety symptoms (r = .56, 95% CI: [.49, .64]). Additionally, PTQ-CPT scores had a strong negative correlation with confidence in clinical skills (r = -.58, 95% CI: [-.64, -.52]).

Discussion

This study examined the psychometric properties of the PTQ-CPT, a measure of RNT related to clinical practice. A unidimensional structure with a pair of correlated errors was found to provide the best fit to the data. This structure was consistent across the three countries examined (Colombia, Mexico, and Peru). Additionally, expected associations with anxiety, depression, and confidence in clinical skills were found.

Our results align with the original validation study of the PTQ-CPT (Dereix-Calonge et al., 2019b), which also found a unidimensional structure with good data fit. Similarly, the consistency reliability in this study was also greater than .90. The main difference in our study was the need to allow for correlated errors. While this could initially be seen as an undesirable property of the test (Dominguez-Lara, 2019), the fact that this modification was observed independently in the three countries studied indicates its robustness and replicability. There is also a conceptual justification for this residual correlation, as both items refer to the intrusive nature of the thoughts. It is also worth noting that the target pop-

Table 3. Graded response model applied to the PTQ-CPT

Item	*a*	b_1	b_2	b_3	b_4
1. Mis dudas sobre la práctica clínica aparecen constantemente en mi mente. [My doubts about the clinical practice come to my mind constantly]	2.02	-2.23	-0.78	0.84	2.27
2. No puedo dejar de preocuparme por mi práctica clínica. [I cannot stop worrying about my clinical practice]	2.41	-1.38	-0.05	0.89	2.08
3. No puedo centrarme en mis tareas cuando me pongo a pensar en la práctica clínica. [I cannot focus on my tasks when I start thinking about the clinical practice]	3.15	-0.33	0.75	1.68	2.44
4. Mis pensamientos en torno a la práctica clínica son repetitivos. [My thoughts about the clinical practice are repetitive]	3.26	-0.69	0.31	1.25	2.15
5. Me quedo atascado en mis preocupaciones acerca de la práctica clínica y no puedo concentrarme en otras actividades. [I get stuck in my worries about the clinical practice and I cannot concentrate on other activities]	3.97	-0.17	0.95	1.74	2.58
6. Sigo haciéndome las mismas preguntas sobre aspectos de la práctica clínica sin encontrar una respuesta. [I ask myself the same questions about aspects of the clinical practice without finding an answer]	2.64	-0.31	0.75	1.61	2.80
7. Me mantengo pensando sobre la práctica clínica todo el tiempo, incluso en momentos en los que hacerlo no es útil o adecuado. [I keep thinking about the clinical practice all the time, even when doing so is not useful or appropriate]	2.91	-0.03	0.99	1.77	2.51
8. Mis pensamientos repetitivos en torno a la práctica clínica no son de mucha ayuda. [My repetitive thoughts about the clinical practice do not help that much]	2.19	-0.31	0.60	1.42	2.36
9. Mi inseguridad por la práctica clínica absorbe toda mi atención. [My insecurity about the clinical practice absorbs all my attention]	2.97	-0.05	0.91	1.83	2.68

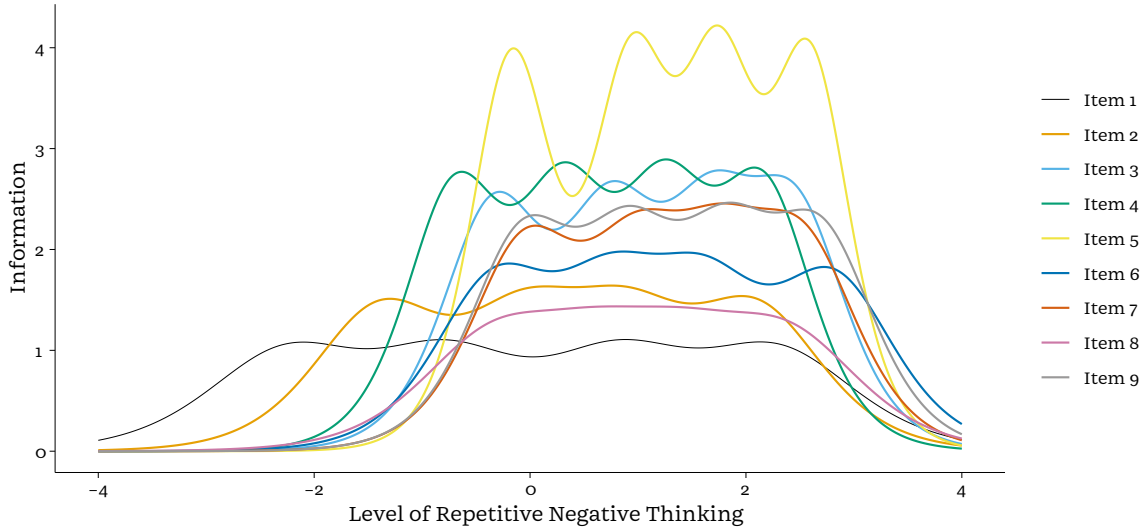


Figure 2. Item information curves of the PTQ-CPT based on a graded response model

ulation of our study was different from that of Dereix-Calonge et al. (2019b), as we included both clinical psychology professionals and students in training.

This study is relevant in two crucial aspects: its implications for mental health and the training of future clinical psychology professionals. By approaching thoughts from a human and contextual perspective, we sought a more holistic understanding and aimed to measure a common transdiagnostic variable for different psychological problems (Ehring & Watkins, 2008). Using a RNT measure facilitates both intervention and research by evaluating a single construct, RNT, instead of multiple individual symptoms or disorders (McEvoy et al., 2013). The population studied faces high levels of stress and emotional burden due to the nature of their work (Pappa et al., 2020), which increases the prevalence of RNT. A validated tool specifically designed for this population allows for a more accurate and relevant assessment of their mental well-being (Dereix-Calonge et al., 2019b). Additionally, an appropriate measure enables the early identification of rumination and worry problems, leading to more effective interventions and the implementation of preventive strategies (Rimes & Wingrove, 2011). This process benefits both trainees and licensed professionals by improving the quality of service they provide to their patients, ensuring they are mentally prepared and able to handle the stress and demands of clinical practice (Allwood et al., 2022; Gossmann et al., 2023).

Several limitations should be considered when interpreting the results of this study. First, the use of a convenience sample of individuals engaged in clinical work, including licensed clinical psychologists and trainees, may limit the generalisability of the results to other populations or settings. The predominance of individuals who voluntarily participated in the study could introduce a self-selection bias, potentially influencing the observed relationships between the variables. Additionally, reliance on self-report measures, such as the PTQ-CPT, PHQ-2, and GAD-2, could be susceptible to common method bias and subjective interpretation by participants. Furthermore, the cross-sectional nature of the study design precludes causal inferences regarding the observed relationships between clinical practice-focused RNT and variables such as anxiety, depression, and confidence in clinical skills. Future research employing longitudinal designs could provide deeper insights into the temporal associations and potential predictive value of RNT on clinical outcomes. Finally, the absence of clinical diagnostic assessment of anxiety and depression limits the ability to conclude clinical diagnoses based solely on self-reported symptomatology.

Despite these limitations, this study provides valuable preliminary insights into the psychometric properties and correlates of the PTQ-CPT in clinical psychology contexts.

In conclusion, this study demonstrated adequate psychometric properties of the PTQ-CPT in professionals and students of clinical psychology. This instrument showed excellent internal consistency and significant correlations with relevant variables such as anxiety, depression, and confidence in clinical skills. Additionally, the quality of the measurement was consistent across the three countries examined, suggesting that the PTQ-CPT can be used in cross-cultural research. Although the previously mentioned limitations must be considered, this study lays the foundation for future research that could delve deeper into the implications of RNT on the emotional well-being and clinical performance of training and practicing professionals. These findings may inform the development of specific interventions to mitigate the negative effects of RNT in training and clinical practice.

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