Psychometric Properties of the Meaning in Life Questionnaire in People Diagnosed with Borderline Personality Disorder*

Propiedades psicométricas del *Meaning in Life Questionnaire* en personas diagnosticadas con Trastorno Límite de la Personalidad

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ABSTRACT

This study analyzed the psychometric properties of the *Meaning in Life Questionnaire* (MLQ) in a sample of people diagnosed with Borderline Personality Disorder (BPD). Participants were 102 residents in Spain (74 women, 72.55 %; 26 men, 25.49 %; and 2 missing data, 1.96 %) age-ranged from 18 years to 68 years old (M= 37.69; *SD* = 12.66) diagnosed with BPD, who completed the MLQ, Purpose in Life Test-10 Items (PIL-10), and Dissociative Experiences Scale II (DES-II). The bidimensional model for the MLQ (Presence of Meaning: MLQ-P, and Search for Meaning: MLQ-S) showed an adequate internal consistency and an excellent fit. The MLQ-P and MLQ-S subcales correlated positively. The MLQ-P scale showed a positive correlation with the PIL-10 and a negative correlation with the DES-II. Introducing meaning in life into interventions with BPD patients can be a useful way to help them to find purpose in their lives, alleviate their existential suffering, and cope with the clinical symptomatology of BPD.

Keywords
meaning in life; borderline personality disorder; Meaning in Life Questionnaire; dissociative experiences; psychometric properties.

RESUMEN

Este estudio analizó las propiedades psicométricas del Meaning in Life Questionnaire (MLQ) en una muestra de personas diagnosticadas con Trastorno Límite de la Personalidad (TLP). Participaron 102 residentes en España (74 mujeres, 72.55 %; 26 hombres, 25.49 %; y 2 datos faltantes, 1.96 %), con edades entre los 18 y los 68 años (M = 37.69; *DE* = 12.66),

todos diagnosticados con TLP. Los participantes completaron el MLQ, el Purpose in Life Test-10 Items (PIL-10) y la Dissociative Experiences Scale II (DES-II). El modelo bidimensional del MLQ (Presencia de Sentido: MLQ-P, y Búsqueda de Sentido: MLQ-S) mostró una consistencia interna adecuada y un ajuste excelente. Las subescalas MLQ-P y MLQ-S se correlacionaron positivamente. La escala MLQ-P presentó una correlación positiva con el PIL-10 y una correlación negativa con la DES-II. Incluir el sentido de vida en las intervenciones con pacientes con TLP puede ser una vía útil para ayudarlos a encontrar propósito, aliviar su sufrimiento existencial y afrontar la sintomatología clínica del trastorno.

Palabras clave
sentido de vida; trastorno límite de la personalidad; cuestionario de sentido de vida; experiencias disociativas; propiedades psicométricas.

Meaning in life in people diagnosed with borderline personality disorder

According to Viktor Emil Frankl, the founder of logotherapy, the most important motivational aspect of human existence is the feeling that one's life is meaningful, and a lack of meaning in life (MiL) can lead to experiencing an existential vacuum and a strong need for MiL (e.g., Frankl, 2010; Martela & Steger, 2016). As many researchers have proposed (e.g., George & Park, 2016), an essential dimension of MiL is having a goal, purpose, or mission in life.

Individuals with BPD often struggle to find purpose in life, leading to worsened symptoms and feelings of discomfort and hopelessness. BPD is characterized by unstable emotions, self-image, relationships, impulsivity, and a fear of abandonment. Those with BPD may face challenges in forming a coherent sense of purpose due to an unstable self-concept and shifting goals, values, and desires. Their fear of rejection can also hinder meaningful relationships, contributing to a lack of direction, emptiness, and a general sense of meaninglessness, making it difficult to establish a stable identity or find MiL.

The relationship between MiL and emotional difficulties in patients with BPD can be understood more deeply by integrating contemporary approaches to the relationships between narrative identity and existential emptiness (e.g., Egerstrom, 2015; McAdams & McLean, 2013). In this context, MiL is seen as a dynamic construction closely linked to the way in which people narrate their personal story and find coherence in their identity. For BPD patients, emotional instability and difficulty maintaining a coherent self-concept can make it difficult to construct a stable narrative, contributing to a fragmented or empty sense of life (e.g., Marco, Pérez et al., 2017).

From the perspective of narrative identity, BPD patients may experience a disconnect between different chapters of their life, which can create an existential void characterized by a lack of purpose and direction. This narrative disconnect can exacerbate emotional difficulties, as the perception of a void in identity can lead to feelings of hopelessness, confusion, and anxiety. In addition, existential emptiness, understood as the feeling of not finding deep MiL, can intensify emotional fluctuations, as the constant search for purpose and stability can lead to emotional overload.

Integrating narrative psychotherapy and meaning-centered therapy into BPD treatment could make it possible to address existential emptiness and emotional difficulties from a perspective that not only focuses on affective regulation, but also on the reconstruction of a coherent and meaningful identity. This could facilitate a therapeutic approach that helps patients integrate their past experiences, recognize patterns in their personal narrative, and find a more stable MiL, which could reduce the intensity of emotional fluctuations and promote greater long-term emotional stability (e.g., Haeyen et al., 2024).

The Meaning in Life Questionnaire

Access to instruments with strong psychometric properties is essential for assessing MiL in individuals with mental disorders. This is crucial for evaluating the inclusion of therapeutic resources focused on MiL in treatment (e.g., Wong, 2012). Since the late 1960s, several instruments have been proposed to assess MiL (Brandstätter et al., 2012). One of them is the

Meaning in Life Questionnaire [MLQ] (Steger et al., 2006), a 10-item scale that assesses how people feel their lives are in terms of MiL [Presence of Meaning: MLQ-P] and how engaged and motivated people are in their efforts to find MiL [Search for Meaning: MLQ-S]. The items are rated on a 7-point Likert scale (1 = Absolutely untrue; 7 = Absolutely true), yielding a range from 5 to 35 for each subscale. The higher the score, the stronger the presence of/search for MiL. The presence of MiL is defined as the sense and significance individuals feel about their existence, while the search for MiL refers to the strength and intensity of their efforts to understand and enhance the meaning, significance, and purpose of their lives (Steger et al., 2006; Steger et al., 2008). These authors found acceptable fit and reliability for the MLQ, as well as adequate convergent and discriminant validity, and that the MLQ-P correlated positively with various measures of health and well-being whereas the MLQ-S correlated negatively with these measures. The MLQ is a useful tool for both therapeutic and research activities (Steger & Shin, 2010).

In many studies the psychometric properties of the MLQ have been reported in both non-clinical and clinical populations, confirming the reliability and factor structure of this scale (Table 1). Some of these studies found a negative correlationship between the MLQ-P and MLQ-S subcales, whereas other studies have reported a positive correlationship, probably due to the influence of sociocultural differences on MiL (e.g., Heintzelman & King, 2014). Most studies found positive correlations between the MLQ-P and measures of MiL, life satisfaction, psychological well-being, and positive affect, while the MLQ-S showed negative correlations with these measures. The only exception was the Schulenberg et al.'s (2011) study, which involved individuals with mental disorders, none of whom had BPD.

Table 1
Studies that have analyzed the psychometric properties of the MLQ

Study	Sample (age range; M_{age}; SD_{age})	Internal consistency	Internal consistency if any item was dropped	Correlation between MLQ-P and MLQ-S	Factor analysis
Steger et al. (2006)	154 USA undergraduates (nr; 21.8; 3.9)	MLQ-P, α = 0.86; MLQ-S, α = 0.87	nr	-0.19	CFA: 2-factor structure
Góngora and Grinhauz (2011)	707 Argentine adults (nr; 34.12; 12.43) and 180 Argentine adolescents (13-18; 15.58; 1.58)	Adult sample: MLQ-P, α = 0.82 by removing item 9 (0.80 with item 9); MLQ-S, α = 0.88. Adolescents sample: MLQ-P, α = 0.78 (0.80 by removing item 9); MLQ-S, α = 0.81	nr	Adult sample: -0.23 Adolescents sample: -0.11	EFA: 2-factor model CFA: the model improved by removing item 9
Schulenberg et al. (2011)	96 people diagnosed with severe mental illness in an inpatient setting (18-69; 44.2; 12.2)	MLQ-P, α = 0.81; MLQ-S, α = 0.90	nr	0.12 (ns)	nr
Chan (2014)	223 Hong Kong Chinese caregivers of patients with chronic illness (18-87; 54.7; 14.2)	MLQ-P, α = 0.84; MLQ-S, α = 0.88	nr	0.47	CFA: the original 2-factor structure was confirmed
Temane et al. (2014)	326 South African undergraduates (18-54; 21; 4.08)	MLQ-P, α = 0.85; MLQ-S, α = 0.84	nr	-0.20	CFA: the original 2-factor structure was confirmed
Aquino et al. (2015)	Study 1: 414 Brazilians undergraduates (18-63; 28.2; 9.50) Study 2: 201 Brazilians undergraduates (18-63; 26.7; 9.56)	MLQ-P, α = 0.85; MLQ-S, α = 0.89	nr	-0.29	CFA: the original 2-factor structure was confirmed
Damásio and Koller (2015)	3020 Brazilian people (18-91; 33.92; 15.01)	MLQ-P, α = 0.90; MLQ-S, α = 0.90	nr	-0.03 (ns)	EFA+CFA: the 2-factor structure was confirmed MLQ-P MLQ-S subscales: better goodness of-fit indexes when evaluated uncorrelated
Hallford et al. (2018)	341earlier older-adults (65-73; 68.5; 2.3) 341 later older-adults (74-92; 78.6; 4.5)	MLQ-P, α = 0.86; MLQ-S, α = 0.92			CFA: Items 9 (MLQ-P) and 10 (MLQ-S) were removed
Damásio et al. (2016)	3020 Brazilian people (18-91; 33.92; 15.01)	MLQ-P, α = 0.90	nr	nr	CFA: the original MLQ-P subscale showed an adequate fit
Schutte et al. (2016)	601 adults from South Africa, Australia, and New Zealand (30-60; 44.11-44.62; 8.53-8.85)	MLQ-P, α = 0.85-0.90; MLQ-S, α = 0.91-0.94	nr	nr	nr
Singh et al. (2016)	826 Hindi people (18-60; 29.44; 12.82)	MLQ-P, α = 0.78; MLQ-S, α = 0.81	nr	0.36	EFA+CFA: the original 2-factor structure was confirmed
Rose et al. (2017)	135 Australian adolescents (12-18; 15.18; 1.42)	MLQ-P, α = 0.82; MLQ-S, α = 0.84	nr	0.13 (ns)	CFA: the original 2-factor structure was confirmed
Chukwuorji et al. (2018)	809 internally displaced persons in Nigeria (12-96; 33.69; 13.18)	MLQ-P, α = 0.82; MLQ-S, α = 0.86	nr	0.72	CFA: the original 2-factor structure was confirmed
Vela et al. (2017)	330 Latina/o college students (18-54; 20.45; 3.89)	MLQ-P, α = 0.92; MLQ-S, α = 0.90	nr	nr	CFA: the original 2-factor structure was confirmed
Balgiu (2020)	320 Romanian undergraduates (18-29; 19.29; 1.42)	MLQ-P, α = 0.79; MLQ-S, α = 0.85	nr	0.17	EFA-CFA: the original 2-factor structure was confirmed
Naghiyaee et al. (2020)	301 Iranian patients undergoing treatment for cancer and multiple sclerosis (20-70; nr)	MLQ-P, α = 0.84; MLQ-S, α = 0.88		0.61	EFA+CFA: the original 2-factor structure was confirmed
Negri et al. (2019)	464 Italian adults (20-60; 39.34; 10.86)	Sample 1 (EFA, N = 232): MLQ-P, α = 0.86; MLQ-S, α = 0.90. Sample 2 (CFA, N = 232): MLQ-P, α = 0.82; MLQ-S, α = 0.89	nr	-0.40 (EFA Sample) -0.49 (CFA, Sample 2)	EFA+CFA: the original 2-factor structure was confirmed
Chen and Gao (2021)	1951 Chinese adolescents (12-18; 13.47; 1.31)	MLQ-P, α = 0.76; MLQ-S, α = 0.85	nr	0.36	nr
Datu and Yuen (2022)	1089 Hong Kong secondary school students (nr; 14.88; 0.99)	MLQ-P, α = 0.84; MLQ-S, α = 0.88	nr	0.40	CFA: the original 2-factor structure was confirmed
Marco et al. (2022)	683 Spanish people (18-83; 35.05; 13.72)	MLQ-P, α = 0.87; MLQ-S, α = 0.89	nr	0.19	CFA: the original 2-factor structure was confirmed
Travezaño-Cabrera et al. (2022)	581 Peruvian undergraduates (18-35; 22.6; 3.3)	MLQ-P, α = 0.86, ω = 0.87; MLQ-S, α = 0.88, ω = 0.88	nr	-0.15	CFA: Item 9 was removed A 9-item 2-factor structure was obtained

Note. nr = Not reported; ns = Not significant; EFA = Exploratory Factor Analysis; CFA = Confirmatory Factor Analysis.

This study analyzed the internal consistency, structural validity, and construct validity of the MLQ in a sample of Spanish individuals diagnosed with BPD. Based on Steger et al.'s (2006) theory, it was expected that the MLQ would demonstrate both structural and construct validity, along with acceptable internal consistency, and that the MLQ-P and MLQ-S subscales would be negatively correlated. To the best of the authors' knowledge, this is the first study to examine these psychometric properties of the MLQ in people with BPD, making it

a novel contribution to the analysis of the instrument.

Examining the MLQ scale in a Spanish-speaking population diagnosed with BPD can contribute to the existing knowledge base regarding the relationship between MiL and mental health in different cultural contexts. It can provide insights into the unique challenges and experiences faced by Spanish-speaking individuals with BPD, which may differ from those of English-speaking populations.

Method

Design and statistical power of the present study

The methodological design of the present study is that of an instrumental analysis of psychometric validation, theoretically supported by the specialized methodological literature (López-Pina & Veas, 2024).

Statistical power was calculated using G*Power version 3.1.9.4 (Faul et al., 2009). The post hoc analysis showed that the power achieved was 0.72, indicating that the study had sufficient power to detect medium effect sizes ($f^2 = 0.15$) with a significance level of 0.05 (Cohen, 1988).

Participants

The study involved 102 individuals diagnosed with BPD, residing in Spain, and recruited from three outpatient mental health services. Psychologists from these institutions recruited participants, who were informed about the research and encouraged to participate voluntarily. A clinical psychologist from the research team that carried out this study established the participants' diagnoses in the outpatient medical services by using the *Structured Clinical Interview for DSM-5 Disorders-Clinician Version* [SCID-5-CV] (First et al., 2016). The inclusion criteria were that participants had to be aged ≥ 18 years old, and satisfy the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) criteria for a BPD (American Psychological Association [APA], 2013). The exclusion criterion was being diagnosed with psychosis or moderate/severe intellectual disability. Table 2 shows the participants' sociodemographic characteristics.

Table 2
Participants' sociodemographic characteristics

Baseline characteristic	*n*	%
Gender		
Women	74	72.55
Men	26	25.49
Missing cases	2	1.96
Age groups		
Emerging adults (18-25 years)	23	22.55
Early adults (26-35 years)	23	22.55
Middle adults (36-45 years)	27	26.47
Mature adults (46-60 years)	24	23.53
Older adults (> 60 years)	5	4.90
Marital status		
Unmarried without couple	41	40.20
Unmarried couple	21	20.59
Married	17	16.67
Separated	15	14.71
Divorced with new couple	1	0.98
Widower	3	2.94
Missing cases	6	5.88
School level		
No studies	3	2.94
Primary school	38	37.26
High School	46	45.10
University	9	8.82
Missing cases	6	5.88

Note. $N = 102$. Participants were age-ranged from 18 to 68 years, $M = 37.69$, $SD = 12.66$.

Procedure

This study was approved by the Research Ethics Committee of the Health Department of the ANONYMIZED. The participants provided their documented informed consent to

participate in this study. The ethical standards for research involving human subjects and the 2013 revised Helsinki statement standards were met.

Participants were assessed individually at the above-mentioned health outpatient services and diagnosed using the DSM-5 (APA, 2013) criteria for BPD. The informed consent was administered and signed prior to the assessment, and participants did not receive any compensation for their participation.

Instruments

Meaning in Life Questionnaire [MLQ] (Steger et al., 2006). The MLQ was translated following the guidelines provided by the International Test Commission (2010). First, two Spanish university professors who are proficient in English and specialists in logotherapy independently translated the English version of the MLQ (Steger, 2010) into Spanish. Then, the authors of this study revised both translations, resulting in a version that was finally revised and improved by a native English-speaking professional translator, text editor, and bilingual consultant. The final translation was used in this study.

Purpose in Life Test-10 Items [PIL-10] (García-Alandete et al., 2013). This scale is a 10-item Spanish adaptation of the PIL (Crumbaugh & Maholic, 1969), which assesses MiL based on logotherapeutic assumptions. The items on the PIL-10 are answered on a Likert scale (from 1 to 7, with a specific anchor for each item). The total score ranges from 10 to 70. In this study, the PIL-10 showed excellent internal consistency, $\omega = 0.95$.

Dissociative Experiences Scale II (DES-II; Carlson & Putman, 1993). The Spanish adaptation by Icarán et al. (1996) was used. The DES-II is a self-reported 28-item scale that assesses different types of dissociative phenomena (amnesia, depersonalization/derealization, and absorption), by asking about how often people may have some experiences in daily life (participants have to select the number, from 0% to 100%, to show what percentage of the time they have the experience). In this study the DES-II showed excellent internal consistency, $\omega = 0.94$.

Statistical Analyses

Means, standard deviations, skewness, kurtosis, item-subscale correlationships, and the change in the McDonald's ω of both the MLQ-P and MLQ-S subscales if any item was dropped were calculated. To estimate the internal consistency of both the MLQ-P and MLQ-S subscales, McDonald's omega (ω) (McDonald, 1999; Ventura-León & Caycho-Rodríguez, 2017) and Cronbach's alpha (α) (Cronbach, 1951; Tavakol & Dennick, 2011) were used.

Then, a Confirmatory Factor Analysis of the MLQ was carried out. The sample size in this study was sufficient to make statistical inferences about the model fit of the MLQ ($n/p = 10.2$) (Pituch & Stevens, 2015). Because Mardia's coefficient for multivariate kurtosis (normalized estimate) was > 5 and the data were ordinal, robust method and Diagonally Weighted Least Squares estimators were used (e.g., Mindrila, 2010). The fit indices used were Chi-Square (χ^2), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), and the Starndardized Root Mean Square Residual (SRMR). For both the CFI and TLI, values ≥ 0.90 indicate acceptable fit and values ≥ 0.95 indicate good model fit; for both the RMSEA and SRMR, values ≤ 0.08 indicate acceptable model fit and values $\leq .05$ indicate good model fit (e.g., Kline, 2016).

To report the construct validity of the MLQ, the correlations with the PIL-10 and the DES-II were analyzed. Because these scales are ordinal, Spearman's rho (ρ) was used for the correlations. Interpretation of effect sizes was based on Cohen (1988).

To carry out all the statistical analyses mentioned in this section, the JASP 0.16 software (JASP Team, 2021) was used.

Results

Descriptive statistics, internal consistency, and item-total correlationships of the MLQ subscales

Table 3 shows descriptive statistics, item-total correlationships, and changes in ω of both the MLQ-P and MLQ-S subcales if any item was dropped. The means for both the MLQ-P and MLQ-S subscales, which were below the score 24 (17.75 and 23.12 respectively), indicate low purpose of meaning and low motivation to search for meaning, according to Steger (2010). The item-total correlations were > 0.60 for the MLQ-P (except the correlation for item 9, which was below .40) and > 0.40 for the MLQ-S.

Both the MLQ-P and MLQ-S subcales showed high internal consistency: MLQ-P, ω = 0. 85 (95% CI [0.80, 0.89]) and α = .83 (95% CI [0.78, 0.89]), MLQ-S, ω = 0.83 w (95% CI [0. 77, 0.88]) and α = .82 (95% CI [0.77, 0.88]). Although the internal consistency of the MLQ-P subcale improved by removing item 9 (*My life has no clear purpose*), we decided to retain it following Steger et al.'s (2006) suggestion. The item-total correlationships were > 0.60 for the MLQ-P subscale (except the correlation for item 9, which was below 0.40) and > .40 for the MLQ- S subscale.

Table 3
Descriptive statistics, item-total correlations, and internal consistency if any item was dropped from the MLQ subscales

MLQ subscale and items	*M* (*SD*)	*Sk*	*K*	Item-subscale correlationship*	MLQ subscale ω if item dropped
MLQ-P	17.75 (7.85)	0.27	-0.66		
1. I understand my life's meaning	3.58 (1.79)	0.26	-0.65	0.62 (S)	0.82
4. My life has a clear sense of purpose	3.13 (2.03)	0.52	-0.92	0.80 (S)	0.77
5. I have a good sense of what makes my life meaningful	3.91 (2.01)	-0.04	-1.19	0.69 (S)	0.80
6. I have discovered a satisfying life purpose	3.50 (2.13)	0.26	-1.24	0.71 (S)	0.80
9. My life has no clear purpose	3.64 (2.17)	0.33	-1.20	0.39 (M)	0.87
MLQ-S	23.12 (7.26)	-0.30	-0.54		
2. I am looking for something that makes my life feel meaningful	4.98 (1.71)	-0.90	0.15	0.45 (M)	0.84
3. I am always looking to find my life's purpose	4.64 (1.92)	-0.50	-0.82	0.60 (S)	0.82
7. I am always searching for something that makes my life feel significant	4.50 (1.89)	-0.41	-0.86	0.71 (S)	0.76
8. I am seeking a purpose or mission for my life	4.64 (1.88)	-0.45	-0.77	0.67 (S)	0.78
10. I am searching for meaning in my life	4.36 (209)	-0.36	-1.14	0.65 (S)	0.77

Note. MLQ = Meaning in Life Questionnaire; MLQ-P = Presence of Meaning; MLQ-S = Search for Meaning. In Italics, reverse-coded item. Standard Error of skewness = 0.24. Standard Error of kurtosis = 0.47. In brackets, the 95% confidence interval. The effect sizes of the correlationships are according to Cohen (1988): S = Strong, M = Moderate

Structural validity of the MLQ

It was found that the bidimensional model for the MLQ suggested by Steger et al. (2006) showed an excellent fit, $\chi^2(34) = 39.16$, $p = 0.25$, CFI = 0.99, TLI = 0.99, RMSEA = 0.04 (95% CI [0.00, 0.09]), SRMR = 0.10. All parameters were significant at the level of 0.001 (Figure 1). The standardized loadings of the items on their respective subcales were above 0.5, except for item 9 (λ = 0.38).

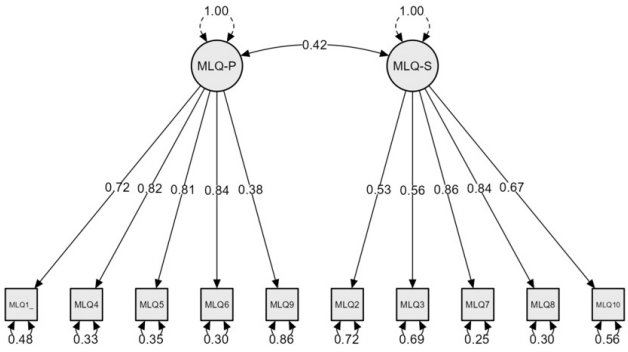

Figure 1
Model for the MLQ obtained in this study.
Note. MLQ-P = Presence of Meaning; MLQ-S = Search for Meaning

Correlationship between the MLQ-P and the MLQ-S

The MLQ-P and MLQ-S subcales correlated positively, $r = 0.42$, $p < 0.001$ (moderate effect size according to Cohen, 1988).

Construct validity of the MLQ subscales

The MLQ-P showed a strong, positive correlationship with the PIL-10 and a strong, negative correlationship with the DES-II. The MLQ-S showed a moderate, positive correlationship with the PIL-10 and a weak, negative correlationship with the DES-II (Table 4).

Table 4
Correlationships between the MLQ and the PIL-A and DES-II

MLQ subscales	PIL-10	DES-II
MLQ-P	0.71*** (S)	-0.51*** (S)
MLQ-S	0.38*** (M)	-0.12*** (W)

Note. MLQ-P = Presence of Meaning; MLQ-S = Search for Meaning; PIL-10 = *Purpose in Life-10* Items; DES-II = *Dissociative Experiences Scale II*. In parenthesis, the effect sizes according to Cohen (1988): S = Strong; M = Moderate; W = Weak. *** $p < 0.001$

Discussion

The aim of this study was to analyze the internal consistency, both structural and construc validity of the MLQ in a sample of Spanish people diagnosed with BDP. It was hypothesized that the MLQ would show both structural and construct validity as well as an acceptable internal consistency, and that the MLQ-P and MLQ-S subscales would be negatively correlated.

Internal consistency of the MLQ subscales

Both the MLQ-P and MLQ-S subscales demonstrated good internal consistency, consistent with previous research. Item 9 ("My life has no clear purpose") may need revision due to its negative phrasing, which could cause confusion. Following Steger et al. (2006), the item was retained, but it is recommended to rephrase it positively and assess its impact on the psychometric properties of the MLQ-P subscale.

Structural validity of the MLQ

The two-factor 10-item model for the MLQ proposed by Steger et al. (2006) showed excellent fit indices in this study, with both CFI and TLI indexes > 0.95 and both RMSEA and SRMR indexes < 0.05.

However, it must be noted that item 9 (*My life has no clear purpose*) showed a low factor loading on the MLQ-P scale, $\lambda < 0.40$. Previous studies (e.g., Chukwuorji et al., 2018; Hallford et al., 2018; Schutte et al., 2016) suggested that this item should be removed from the MLQ. As noted above, it would be interesting to word item 9 in a positive sense and analyze the effect on the psychometric properties of the MLQ-P subscale.

Correlation between Presence of/Search for Meaning

A positive and significant correlation was found between the MLQ-P and MLQ-S subscales. However, the mean scores of the BPD patients were below 24 on both subscales. According to Steger (2010), scores below 24 suggest that individuals likely do not perceive their life as meaningful or purposeful, are not actively seeking meaning, and may not find contemplating their life's meaning important.

Participants in this study exhibited low presence of meaning and low motivation to search for meaning in their lives. According to Steger (2010), this suggests they likely do not feel their life has purpose, are not actively seeking meaning, and may not find contemplating life's meaning important. They may experience dissatisfaction, lack optimism, infrequent positive emotions, and feelings of anxiety, sadness, or depression. Additionally, they may seek stimulating experiences, be disorganized or tense, and not engage socially or warmly with others.

These are characteristics of people diagnosed with BPD. Therefore, it is not uncommon for individuals diagnosed with BPD to score low on both the MLQ-P and MLQ-S subscales due to their psychopathology (APA, 2013).

Construct validity of the MLQ

Both the MLQ-P and MLQ-S subcales showed a positive correlationship with the PIL-10 and a negative correlationship with the DES-II. That is, both of the MLQ subcales correlated positively with a measure of MiL and negatively with a psychopathological measure, which is consistent with the positive correlation between presence of meaning and search for meaning found in this study.

The nuance is that the correlationships with both the MiL measure and the dissociation measures were stronger for presence of meaning (MLQ-P) than for search for meaning (MLQ-S), which would be expected considering what each MLQ subcale specifically measures (Steger et al., 2006, 2008).

Clinical implications

As many researchers have proposed (e.g., George & Park, 2016), an essential dimension of MiL is having a goal, purpose, or mission in life. People diagnosed with BPD have difficulty finding purpose in life (Marco, Pérez, et al., 2017), which in turn leads to a worsening of their symptoms and an intense experience of discomfort and hopelessness.

BPD is characterized by unstable emotions, self-image, relationships, impulsive behavior, and a fear of abandonment. Individuals with BPD often struggle with a fluctuating self-concept, shifting goals, values, and desires, making it hard to develop a clear sense of purpose. Their fear of rejection can hinder the formation of meaningful relationships. These factors contribute to a lack of direction, feelings of emptiness, and a sense of meaninglessness, making it difficult for individuals with BPD to establish a stable identity and find meaning in their lives.

BPD is associated with unique symptoms that can greatly affect one's sense of meaning, such as higher levels of existential distress, feelings of emptiness, and challenges in setting long-term goals. As a result, individuals with BPD may have different responses on instruments measuring MiL compared to those with other mental health disorders or the general population.

It is important to consider these differences and tailor intervention strategies accordingly when working with individuals with BPD. Therapeutic approaches that focus on helping

individuals build identity coherence, develop stable goals and values, and enhance emotional regulation skills may be particularly beneficial in addressing the challenges related to finding MiL for those with BPD.

Furthermore, the sensitivity of MLQ to capture fluctuations in the experience of MiL in people diagnosed with BPD is a crucial aspect that requires attention in its clinical applicability. Because these patients exhibit emotional instability, difficulties in affective regulation, and fluctuations in their self-concept, their responses to MLQ may be more volatile and less predictable than in other populations. Fluctuations in their experience of MiL may reflect abrupt changes in their identity, goals, and values, raising questions about whether the MLQ is sensitive enough to capture these changes accurately.

Although the MLQ can provide an overview of the experience of MiL in patients diagnosed with BPD, it is advisable to complement it with additional tools that assess emotional stability and fluctuations in their experience of MiL over time. A multidimensional approach that combines MLQ with other specific assessments could improve the accuracy of pattern identification in this population. This approach would allow for a more complete understanding of how emotional and self-concept fluctuations impact the experience of MiL in people diagnosed with BPD.

On the other hand, having an adaptation of the MLQ for the Spanish-speaking population allows us to evaluate MiL in it in a reliable and valid way. It should be noted that the way in which the purpose of existence is conceived can vary significantly between cultures. Cultural and social characteristics play a central role in interpreting MiL, which can influence how people respond to the questionnaire. An adequate adaptation that ensures that the questions are understood correctly allows the MLQ to adequately capture the cultural and social dimensions relevant to the Spanish-speaking population. This also allows the questionnaire to be a more effective tool in the clinical context and in research, facilitating therapeutic intervention and the assessment of well-being in this cultural group.

Experiencing MiL can be a strong activator of motivation to cope with the symptomatology of mental disorders (e.g., Conner et al., 2022; Gross et al., 2019; Kelso et al., 2020; Marco et al., 2016, 2020; Marco & Alonso, 2019; Pérez et al., 2017; Sun, Wu, et al., 2022), and it can improve the results of psychotherapeutic interventions for people diagnosed with mental disorders (e.g., Fulford et al., 2020; Schulenberg et al., 2008; Sun, Chiu, et al., 2022). In BPD patients, MiL has been found to moderate and buffer the association between suicide risk factors and hopelessness (Marco, Guillén, et al., 2017). Therefore, introducing MiL in therapy can help individuals with BPD alleviate existential suffering by providing a sense of purpose and a motivation for personal growth and recovery. Despite the challenges of BPD, individuals can still find meaning in life, experience life satisfaction, set meaningful goals, and build positive, constructive relationships with others. This approach can be beneficial for fostering personal development and improving overall well-being:

MiL provides hope: People with BPD often experience feelings of emptiness and lack of purpose. Introducing the concept of MiL in therapy can help them develop a new perspective, fostering hope and motivating them to work towards a more fulfilling life.

MiL enhances motivation for recovery: Finding MiL can be a strong motivator for individuals with BPD to engage in therapy and make positive changes. With a clear sense of purpose and goals, they are more likely to actively participate in therapy and take responsibility for their recovery.

MiL encourages self-reflection and self-exploration: Introducing MiL encourages individuals with BPD to reflect on their core values, beliefs, and goals, fostering self-exploration. This process helps them gain insight into their emotions and behaviors, allowing them to examine the roots of their distress and align their actions with their sense of purpose.

MiL promotes emotional stability: BPD is characterized by intense and unstable emotions. Having a sense of meaning can stabilize emotions, reducing the severity of emotional dysregulation and improving the ability to cope with distressing feelings by fostering a purposeful life.

MiL offers a sense of identity: Individuals with BPD often experience identity instability. Through therapy, exploring their values, passions, and goals can help them develop a clearer sense of identity, leading to increased self-esteem, confidence, and a more stable sense of self.

MiL fosters resilience: Embracing a sense of MiL can strengthen resilience, helping individuals overcome challenges and persist in pursuing goals. For those with BPD, this resilience is especially beneficial, as it enables them to bounce back from difficult experiences and continue their recovery journey.

Briefly, introducing MiL in therapy for individuals diagnosed with BPD can have transformative effects by providing a sense of purpose, fosters motivation for recovery, enhances self-exploration and emotional stability, offers a clearer sense of identity, and promotes resilience in the face of adversity.

Regarding psychotherapy for people diagnosed with BPD, a useful strategy would be to combine Dialectical-Behavioral Therapy (DBT; Lungu & Linehan, 2017), which is currently the main treatment for BPD, with Meaning-Centered Counseling and Therapy [MCCT] (Wong, 2012). MiL could serve as a motivational key to integrate acceptance and change in DBT, aiding patients in coping with BPD symptoms. DBT focuses on skills for managing emotions, improving relationships, tolerating distress, and practicing mindfulness. In contrast, MCCT emphasizes pursuing meaningful, purposeful living to overcome challenges and enhance well-being, with finding meaning in life serving as a powerful motivator in facing adversity and grief.

Combining DBT and MCCT allows individuals to develop emotional regulation skills while also exploring their sense of purpose and meaning. This approach recognizes that emotional regulation alone isn't enough for healing and growth. By reflecting on what gives their life value, individuals can better understand their motivations, goals, and improve their ability to handle difficult emotions. Therapists using this combined approach can teach DBT skills, like distress tolerance and emotion regulation, while encouraging clients to explore their values, engage in meaningful activities, and find purpose in their lives.

Combining DBT and MCCT offers a holistic treatment approach that addresses both emotional regulation and the existential aspects of well-being. This combination helps individuals manage emotions while finding greater fulfillment and purpose. To date, this integration has not been implemented, presenting an intriguing challenge for researchers seeking to improve therapeutic methods for patients with BPD. An example of how to combine DBT with MCCT in the treatment of BPD patients could be the management of an existential crisis. When a BPD patient experiences strong emotional distress related to an existential void, DBT can be used to calm the immediate emotional response by teaching mindfulness techniques and discomfort tolerance. Subsequently, the MCCT can help explore the emotional void, guiding the patient to reflect on their core values and how these can offer a path to finding purpose. For example, the therapist may ask, "What does this void mean to you?" and "How can you align your decisions with what's most important to you?". This integration allows not only to manage emotional discomfort in the short term, but also to work on building a more coherent and meaningful sense of life.

Limitations of this study and suggestions for further research

A limitation of this study was the variation in participants' sociodemographic characteristics, which could lead to biases, exclusion, oversimplification, and limited generalizability. Future studies should use larger, more

balanced samples in terms of sociodemographic characteristics.

Another limitation of this study was the lack of test-retest reliability, which affects the quality, validity, and generalizability of the findings. This limits the ability to draw accurate conclusions and hampers study replicability. Future research should focus on analyzing the test-retest reliability and validity of the MLQ, considering factors such as the time interval between tests, practice effects, and the stability of the measured construct.

It would be beneficial to conduct studies with large, balanced subsamples of various mental disorders and to analyze the MLQ's psychometric properties in other clinical populations, such as individuals with disabilities. This would help assess the scale's invariance across different groups and explore differences in MiL. Additionally, future research could investigate whether MiL positively influences the negative emotional experiences of BPD patients, such as whether higher meaning in life correlates with lower distress.

Another limitation of the present study was the impossibility of performing a factorial invariance analysis according to the gender or age of the participants, since the samples size of both the sex and age subgroups was insufficient. This small subsamples size limited the ability to carry out robust and reliable analyses, which could affect the validity of the results in terms of statistical power. Consequently, it was not possible to perform a meaningful and generalizable analysis of invariance as a function of these variables. It would be interesting if future studies included sample sizes in the variables sex, age and other relevant variables that would allow invariance analyses to be carried out.

This study found a negative correlation between the MLQ subscales and the DES-II. It would be valuable to conduct further research to explore whether MiL positively influences the negative emotional experiences of BPD patients, such as reducing distress. Additionally, using measures specific to BPD psychopathological characteristics, like identity disturbance, impulsivity, anxiety, dissociative symptoms, and stress-related paranoia, would provide more insights.

It would be interesting to explore whether rewording item 9 in a positive manner would lead to significant changes in the psychometric properties of the MLQ-P. Based on the results of this study and previous research, it is hypothesized that both the internal consistency and structural validity of the MLQ-P scale would improve.

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The authors report that there are no competing interests to declare. This study was approved by the Research Ethics Committee of the Health Department of the Hospital of La Ribera (Alzira, Spain). The patients/participants provided their written informed consent to participate in this study. The ethical standards for research involving human subjects were met. The participants in this study completed the informed consent and gave it to the authors. The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request. The study was not funded.

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Notes

* Research article.

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