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The effectiveness of a third-generation cognitive behavioral therapy intervention program on psychological well-being for nursing professionals

Carlos Patiño [a], Jefferon Elizalde-Sócola [b], & Omayck Fernando Valarezo-Bravo [1c] [2]

Universidad de Cuenca, Cuenca, Ecuador [a]; Universidad del Azuay, Cuenca, Ecuador [b], Universidad Católica del Norte, Antofagasta, Chile [c].

ABSTRACT

Nursing professionals (NPs) play a crucial role in public health by providing direct care and maintaining the quality of health services. However, they face emotional challenges that can affect their psychological well-being (PW). The purpose of this study was to evaluate whether the implementation of a Dialectical Behavioral Skills Training (DBT) program could increase PW levels among NPs in healthcare centers in the Northern Cuenca District of the Ministry of Public Health (MSP). The present research is an experimental study employing a two-group randomized design with pre- and postintervention measures. The instruments used were a sociodemographic instrument and the Ryff Psychological Well-being Scale. The study included 83 nursing professionals (NPs) from health centers in Cuenca. Nonprobabilistic convenience sampling was used due to Ministry of Health restrictions. A minimum sample of 30 participants (27 female, 3 male) aged 20-65 years ensured statistical accuracy while considering workplace demands and resources. The results indicated that the contextual therapy intervention program significantly improved the psychological well-being (PW) of nursing professionals (NPs), offering an effective strategy to address the emotional challenges they encounter in their work. This study emphasizes the importance of implementing targeted interventions, such as dialectical behavior therapy (DBT), to increase the psychological well-being of healthcare professionals.

Keywords
psychological well-being, cognitive–behavioral therapy, dialectical behavioral skills, DBT

RESUMEN

Los profesionales de enfermería (NPs, por sus siglas en inglés) desempeñan un papel crucial en la salud pública al brindar atención directa y mantener la calidad de los servicios de salud. Sin embargo, enfrentan desafíos emocionales que pueden afectar su bienestar psicológico (PW, por sus siglas en inglés). El propósito de este estudio fue evaluar si la implementación de un programa de Entrenamiento en Habilidades Conductuales Dialécticas (DBT, por sus siglas en inglés) podría aumentar los niveles de PW entre los NPs en los centros de atención médica en el Distrito Norte de Cuenca del Ministerio de Salud Pública (MSP). La presente investigación es un estudio experimental que emplea un diseño aleatorio de dos grupos con medidas pre y post intervención. Los instrumentos utilizados fueron un instrumento sociodemográfico y la Escala de Bienestar Psicológico de Ryff. El estudio incluyó a 83 profesionales de enfermería (NPs) de centros de salud en Cuenca. Se utilizó un muestreo no probabilístico por conveniencia debido a restricciones del Ministerio de Salud. Una muestra mínima de 30 participantes (27 mujeres, 3 hombres) de entre 20 y 65 años garantizó la precisión estadística, teniendo en cuenta las demandas y recursos laborales. Los resultados indicaron que el programa de intervención de terapia contextual mejoró significativamente el PW de los NPs, ofreciendo una estrategia efectiva para abordar los desafíos emocionales que enfrentan en su trabajo. El estudio subraya la importancia de implementar intervenciones dirigidas como DBT para mejorar el bienestar psicológico de los profesionales de la salud.

Palabras clave
bienestar psicológico, terapia cognitivo-conductual, habilidades conductuales dialécticas, DBT

[1] Correspondence about this article should be addressed **Omayck Fernando Valarezo-Bravo:** omayck.valarezo@unl.edu.ec

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La efectividad de un programa de intervención de terapia cognitivo-conductual de tercera generación en el bienestar psicológico de los profesionales de enfermería

Introduction

Nursing professionals (NPs) face significant challenges that impact their psychological well-being (PW) (Katana et al., 2019). High workloads, exposure to stressful situations, inadequate resources, and a lack of emotional support in the workplace are among the factors contributing to stress levels, burnout, and mental health deterioration among nursing professionals (Cantrell et al., 2017; Qu & Wang, 2015; Tung et al., 2018). One of the main problems faced by healthcare professionals, such as nurses, is burnout, or occupational exhaustion (Lyndon, 2017). Burnout, or occupational exhaustion, is a state of emotional, mental, and physical fatigue caused by prolonged work-related stress. It manifests through symptoms such as depersonalization toward colleagues and patients, as well as low personal accomplishment. It may also include physical symptoms, such as sleep disturbances, and behavioral changes, such as irritability and frustration (Freudenberger, 1974). It is estimated that burnout affects between 10% and 70% of nurses, with 47% to 52% reporting symptoms of fatigue and exhaustion (Lyndon, 2017; Zhang et al., 2018). Additionally, it has been associated with symptoms of stress, anxiety, and depression, which negatively impact patient safety (de Oliveira et al., 2023; Dollarhide et al., 2014; Saleh et al., 2014). Research indicates that high levels of stress and burnout are related to decreased overall well-being and an increased frequency of medical errors. One study revealed a significant correlation between poor well-being and lower patient safety, underscoring the importance of addressing burnout not only as an individual issue but also as a critical factor in the quality of care (Hall et al., 2016).

Therefore, studying psychological well-being is essential, as it represents a positive state of functioning that enables individuals to reach their full potential, cope with stressful situations, perform productively, and contribute to the community (Trudel-Fitzgerald et al., 2019). This situation not only affects the quality of life and individual well-being of nurses but also influences the quality of patient care and the overall effectiveness of the healthcare system (Yousaf et al., 2020).

Additionally, it is associated with gratitude, interpersonal relationship skills, and life satisfaction in NPs (Jun et al., 2015). Similarly, it is linked to quality of life, job and

academic performance, satisfaction in interpersonal relationships, and the ability to face challenges (Yánez-Ramos & Moreta-Herrera, 2020).

Thus, various approaches and theoretical models have emerged with the purpose of defining and evaluating PW. Some of these approaches emphasize the importance of cognitive factors, such as perceived control and optimism (Dagenais-Desmarais & Savoie, 2012), whereas others focus on emotional aspects, such as the ability to manage both positive and negative emotions in a healthy way and the ability to regulate emotions (Ryff & Singer, 2008). In this context, psychological well-being (PW) emerges as a crucial element in preserving optimal mental health. It goes beyond the mere absence of mental or emotional disorders, also encompassing a sense of well-being and fulfilment. Likewise, the psychological well-being of nursing professionals (NPs) significantly influences their own health, the quality of patient care, and the stability of the healthcare system as a whole (Wexler & Schellinger, 2023).

Contextual therapies

Contextual therapies, such as dialectical behavioral therapy (DBT), which is prominent in this category, have proven effective for various mental health issues (Linehan, 2015). It combines behavioral strategies with acceptance and mindfulness techniques, emphasizing emotional regulation and distress tolerance. It is based on the premise that individuals can acquire skills to manage intense emotions and reduce impulsivity. Similarly, contextual therapies include acceptance and commitment therapy (ACT), which focuses on assisting individuals in accepting difficult thoughts and emotions rather than fighting or trying to control them (Gloster et al., 2020).

In addition to DBT and ACT, there are other therapeutic modalities for contextual therapies. For example, mindfulness-based cognitive therapy combines elements of cognitive therapy with mindfulness practices. Its main focus is to help individuals develop greater awareness of their thoughts, emotions, and bodily sensations through mindfulness, allowing them to observe them without judgment or automatic reactions (Goldberg et al., 2019). On the other hand, functional analytic psychotherapy is based on the theory of functional analysis, which involves identifying and understanding how problematic behaviors are maintained in the context of relationships with others. It focuses on improving interpersonal relationships by addressing dysfunctional patterns of behavior in social interactions (Macías et al., 2019). The therapist works in real time with the client,

providing immediate feedback and reinforcing desired behaviors. Metacognitive therapy focuses on how people think about their own thoughts and how they regulate and monitor their cognitive processes. Instead of solely focusing on modifying negative thoughts, this intervention aims to help individuals change their thinking strategies and their relationships with thought, such as through rumination and excessive worrying (Normann & Morina, 2018). This approach is based on the idea that changing the way people think about their thoughts can be an effective strategy for addressing mental health problems.

These contextual therapies share a common theoretical basis, focusing on promoting acceptance, mindfulness, commitment, and emotional self-regulation (García et al., 2017). Although each of these therapeutic modalities has its own techniques and specific approaches, their overall goal is to assist individuals in developing psychological and emotional skills, facilitating a more fulfilling and meaningful life. The four fundamental skills of dialectical behavior therapy—distress tolerance, mindfulness, emotional regulation, and interpersonal effectiveness—are referred to as *DBT skills training* (Van Dijk, 2013). In 2021, a study investigated the impact of DBT skills training on emotional regulation and whether improvements in specific facets of emotional regulation would be linked to training in particular modules. A total of one hundred thirty-six patients diagnosed with various mental health conditions participated in the study. Emotional regulation was assessed at the beginning and end of each module. The analysis revealed that each skill training module was associated with improvements in emotional regulation (Heath et al., 2021).

Dialectical behavioral skills for nursing professionals

Implementing dialectical behavioral skills training (DBT) for nursing professionals (NPs) involves teaching a set of skills designed to help them manage their emotions, communicate effectively, and develop healthy relationships (Beanlands et al., 2019). By developing these skills, NPs can acquire new ways of interpreting situations, which can help them be more effective in their work. Through this process, they can also learn to identify their emotions and manage their reactions to challenging situations. The practice of mindfulness can significantly contribute to improving individuals' concentration, facilitating decision-making, and fostering adaptive responses to stressful scenarios. Similarly, communication is enriched through this intervention, allowing NPs to express themselves clearly and assertively. At the same time, empathy and

receptiveness toward the needs of others are encouraged. This approach not only strengthens the connection between nurses and their patients but also promotes strong relationships with colleagues, thus creating a more collaborative work environment. This set of skills contributes not only to improving the quality of care provided but also to creating a more cohesive and efficient work environment.

Contextual therapy-based interventions, including mindfulness, have demonstrated positive effects on healthcare professionals by improving their health, increasing empathy and work engagement, and reducing burnout and negative emotions (Kim et al., 2019; Suleiman-Martos et al., 2020; Chen et al., 2017). These interventions have also been shown to be effective at decreasing levels of burnout and depersonalization, as well as increasing personal accomplishment (Conversano et al., 2020). Furthermore, training in dialectical behavior therapy (DBT) skills can help reduce the perception of burnout. In 2021, a study was conducted to assess burnout among nursing professionals in a combined inpatient and day hospital unit for pediatric eating disorders after they had been trained in dialectical behavior skills. The results indicated that staff believed that teaching dialectical behavior skills has the potential to reduce burnout (Couturier et al., 2021).

On the other hand, in 2023, research was conducted to determine whether teaching interpersonal effectiveness skills through workshops could improve professional fulfilment and interpersonal coping ability and reduce dysfunctional coping styles in 72 NPs. The results indicated a significant improvement in all three areas mentioned, suggesting the effectiveness and feasibility of teaching DBT interpersonal effectiveness skills in this population (Wu et al., 2023).

Psychological well-being model and dialectical behavioral skills training

The psychological well-being (PW) model (Ryff, 1989) and dialectical behavioral skills training (DBT) are valuable resources that complement each other to promote PW in various areas of life. DBT has the potential to foster autonomy, improve environmental mastery, cultivate positive relationships, and increase self-awareness and acceptance, which are fundamental elements of PW (van Dierendonck & Lam, 2023).

Mindfulness practices have been supported by numerous studies in various areas, including psychological disorders and high-stress situations. Mindfulness-based interventions have shown positive results in reducing anxiety, depression, and stress.

Additionally, mindfulness enhances attention, promotes acceptance of experiences without judgment, and fosters the ability to self-regulate emotions (Iyer, 2022). These benefits support its application as an effective tool for promoting PW and improving quality of life. Melnyk et al. (2020) reported that combined interventions of cognitive–behavioral therapy and mindfulness, including NPs, reduce stress, anxiety, and depression in healthcare professionals. Even brief interventions with simple techniques such as deep breathing and gratitude practice can be beneficial. A study by Baramesipour et al. (2015) evaluated the effectiveness of DBT on the PW of diabetic patients via Ryff's PW scale. The results revealed significant improvements in all dimensions of PW assessed, including self-acceptance, positive relationships, autonomy, environmental mastery, personal growth, and purpose in life (Baramesipour et al., 2015). In a meta-analysis of PW and emotional regulation by Kraiss et al. (2020), a positive relationship was found between strategies such as acceptance, re-evaluation, and PW. Avoidance and rumination had negative effects, and emotional deficits were associated with a decrease in PW.

The combination of these models provides a comprehensive approach to enhancing PW, addressing fundamental aspects of life and fostering broader balance and satisfaction in different areas. Therefore, the research question arising from the study is as follows: Can a contextual therapy intervention program increase the psychological well-being of nursing professionals in the health centers of Cuenca?

The objectives of this research were a) to identify the levels of psychological well-being of nursing professionals and relate the postintervention PW levels of the experimental group to sociodemographic variables and b) to evaluate the effectiveness of a contextual therapy -based intervention program in increasing the PW of NPs in the Cuenca North District of the Ministry of Public Health.

Method

Design

The present research is an experimental study employing a two-group randomized design with pre- and postintervention measures.

Participants

The study population comprised all the nursing professionals (NPs) from health centers in the city of Cuenca, totaling 83 individuals. The sample was selected via

nonprobabilistic convenience sampling, given the restrictions imposed by the Ministry of Health, primarily owing to the difficulty of allowing prolonged absence of NPs from their workplaces, where the demand for patient care is continuous. A minimum sample of n=30 participants was established to ensure statistical accuracy and the ability to detect relevant effects, considering the limitations and resources available. After applying the inclusion and exclusion criteria, a sample of 30 participants, 27 of whom were female and 3 of whom were male; and aged between 20 and 65 years, was obtained.

Procedure

The study was approved by the ethics committee of the Universidad de Cuenca [Nro. CEISH-UC-2023-276]. The inclusion criterion for participants was active nursing professionals (NPs) in health centers in the North Cuenca District of the MSP. They did not have received dialectical behavioral therapy in the last 6 months or had been diagnosed with psychiatric disorders. The research was conducted at the Technical Office North Cuenca of District 01D04 - MSP, which is located in Cuenca. An institutional letter of interest was obtained for access, and the protocol was submitted to the Committee of Ethics for Research in Human Beings for review and approval. A schedule of activities was subsequently established with the Occupational Health Department. The study was carried out at Health Center No. 1 Pumapungo.

The initial sample consisted of n=83 NPs. Owing to restrictions, the sample size was reduced to n=30 via nonprobabilistic sampling. Participant selection was coordinated by the Technical Office North Cuenca. Nonselected NPs were encouraged to continue using clinical psychology services. The participants were invited to a group session where they were informed about the study and provided informed consent. Sociodemographic data were subsequently collected, and psychological well-being was assessed.

Two groups were created—the experimental group and the control group—with random assignment to ensure initial equivalence and blinding. The participants in the experimental group received email notifications for the intervention program sessions. Those in the control group received the intervention later. Messages were kept anonymous to prevent biases. The program consisted of 10 sessions, 7 groups and 3 individuals, led by the investigating psychologist. Group sessions were held at Auditorium 1, and individual sessions were held at the Occupational Health Office. A

posttest was administered at the end of the program for both groups, and the results were analyzed.

Instruments

Sociodemographic characteristics

A sociodemographic data sheet was used to collect basic information from the participants, such as gender, age, marital status, religion, educational level, work experience in the MSP, type of contract, and family responsibilities. This sheet provided relevant information about the sample characteristics.

Psychological Well-being Scale (Díaz et al., 2006; Ryff, 1989)

The reliability and validity criteria of the Psychological Well-being Scale have been studied by various researchers in Ecuador (Moreta-Herrera et al., 2021). The reliability of the Ryff Psychological Well-being Scale in the Ecuadorian population was assessed, and high internal consistency (α= >.71) was obtained according to the Cronbach's alpha coefficient, demonstrating that the scale is reliable for measuring psychological well-being in the Ecuadorian population. This study has shown that the adapted version of the scale has adequate reliability, meaning that the scores obtained on the scale are consistent and stable over time.

Dialectical Behavioral Skills Training Program

The protocol consists of an intervention program designed to improve the psychological well-being of nursing professionals. It begins with a group pretest session, where the program is introduced, sociodemographic information is collected, and the Ryff Psychological Well-being Scale is administered. Then, ten group sessions and three individual sessions are conducted for the experimental group. In the group sessions, different topics related to dialectical behavioral approaches, mindfulness, emotional distress tolerance, effective communication, self-regulation, interpersonal skills, crisis management, decision-making, and relapse prevention were addressed. Each session included specific activities related to the discussed topics, and a variety of resources, such as presentations, slides, and practical exercises, were used.

Individual sessions focus on more personalized aspects, such as decision-making skills development, relapse prevention, long-term self-care, and reflection on program progress. Finally, a group posttest session is conducted for the control group, where participants are thanked, their psychological well-being is assessed via the Ryff Psychological Well-being Scale, and information about future intervention programmes is provided. Each session has a duration of 60 minutes and is facilitated by a psychologist, with resources such as an auditorium, laptop, projector, slides, bond paper sheets, pens, and the digitalized Ryff Psychological Well-being Scale.

Data analysis

In the initial phase of the study, a database was created and managed via Microsoft Excel to store the sociodemographic information and levels of PW collected through Google Forms. This database was subsequently transferred to SPSS 29 (Statistical Package for the Social Sciences) software to perform the statistical analyses, and the results are presented in the form of tables and graphs. Additionally, R 4.3.1 statistical software was used to generate box plots that facilitated the visualization and analysis of the data distribution related to PW in various contexts. The categorization of PW levels (low, moderate, high, and elevated) was selected for its practical value in interpreting and communicating results. This approach is supported by previous research, including studies by Díaz et al. (2006) and Ryff (1989), who validated the use of these categories in various contexts, such as occupational health, where they help identify critical areas in need of intervention (Moreta-Herrera et al., 2021).

To fulfil the first specific objective, which consisted of identifying PW levels in nursing professionals (NPs), evaluations were conducted on different scales (low, moderate, high, and elevated). Descriptive analysis was employed to determine the frequency and percentage of participants at each level, providing a comprehensive view of the distribution of PW levels in the group. Regarding the second specific objective, which aimed to relate the PW levels of the experimental group postintervention with sociodemographic variables, cross-tabulations were performed. Furthermore, the chi-square test was applied to identify possible relationships between sociodemographic variables and PW levels of the experimental group after receiving the intervention. To address the general objective, which was to evaluate the effectiveness of the intervention program in increasing the PW of NPs, the Shapiro–Wilk normality test was conducted,

given the sample size (n<50). The results revealed that p>0.05, indicating a normal distribution of the data and allowing the use of parametric tests in the analysis. Therefore, a comparison of related samples was performed via Student's t test, which was appropriate for evaluating differences before and after the intervention.

Results

The following are the results obtained regarding the objectives established at the beginning of this study. The results are presented following the sequence of the specific objectives until the general objective is reached.

a) Identify the levels of psychological well-being of nursing professionals and relate the postintervention PW levels of the experimental group to sociodemographic variables

Identification of the levels of psychological well-being in the control group

When evaluating the levels of PW of the total sample, prior to the creation of the control and experimental groups, the levels of PW in the control group at the general level, in the pretest group, and in the posttest group are identified in Table 1.

Table 1

Descriptive analysis of PW levels in the control group

	Total group		**Control group Pretest**		**Control group Posttest**	
	n	**%**	**n**	**%**	**n**	**%**
Low PW	7	23.3	4	26.7	4	26.7
Moderate PW	8	26.7	4	26.7	5	33.3
High PW	8	26.7	4	26.7	4	26.7
Elevated PW	7	23.3	3	20.0	2	13.3
Total	30	100	15	100	15	100

Note. n = number; % = percentage.

Identification of psychological well-being levels in the experimental group

The results of the evaluation of psychological well-being levels in the experimental group are shown in Table 2. Finally, we carefully considered the relevance of employing gender-inclusive language, including the use of epicene and gender-neutral forms. Notably, prior research has highlighted the potential for bias in scales utilizing the masculine-generic form (Vainapel et al., 2015). Consequently, incorporate gender-neutral forms in the translation was considered crucial to mitigate possible distortions in result interpretation, thereby enhancing accuracy and validity in the cross-cultural assessment context.

Table 2

Descriptive analysis of PW levels in the control group posttest

	Experimental group Pretest		**Experimental group Posttest**	
	n	**%**	**n**	**%**
Low PW	3	20.0	-	-
Moderate PW	4	26.7	2	13.3
High PW	4	26.7	7	46.7
Elevated PW	4	26.7	6	40.0
Total	15	100	15	100

Note. n = number; % = percentage.

Associations between psychological well-being and sociodemographic variables

Table 3 presents the results of the chi-square test for psychological well-being levels in the experimental group postintervention with sociodemographic variables.

Table 3

Chi-square tests of PW levels in the experimental group postintervention with sociodemographic variables

Variable	Chi-square value	df	p values
Sex	1.224	2	.542
Age	2.637	2	.267
Marital status	6.088	4	.193
Religion	.371	2	.831
Education	1.310	2	.520
Years working in MSP	5.810	8	.669
Type of contract	10.720	4	.03*
Family burden	10.982	6	.089

Note. MSP = Ministry of Public Health; * = $p<0.05$; df = degrees of freedom.

b) Evaluate the effectiveness of a contextual therapy -based intervention program to increase the psychological well-being of nursing professionals in the Northern District of Cuenca from the Ministry of Public Health.

Evaluation of the effectiveness of the intervention program

Table 4 presents the results of the comparison of related samples via Student's t test, which revealed significant differences between the control group and the experimental group. In the control group, no statistically significant difference was found between the pretest and posttest measurements, with a mean of 144.27 in the pretest and 143.27 in the posttest, and a t- statistic of 1.08, with a p value of 0.148.

On the other hand, in the experimental group, a significant difference was observed between the pretest and posttest measurements. The mean in the pretest was 143.47, with a standard deviation of 37.384, whereas in the posttest, it was 163.6, with a standard deviation of 24.278. The t-statistic was -5.51, with a p value of 0.001, indicating

a positive impact of the treatment or intervention implemented in this group. These results suggest that the intervention had a significant effect on the experimental group, highlighting the importance and effectiveness of the applied program.

Table 4

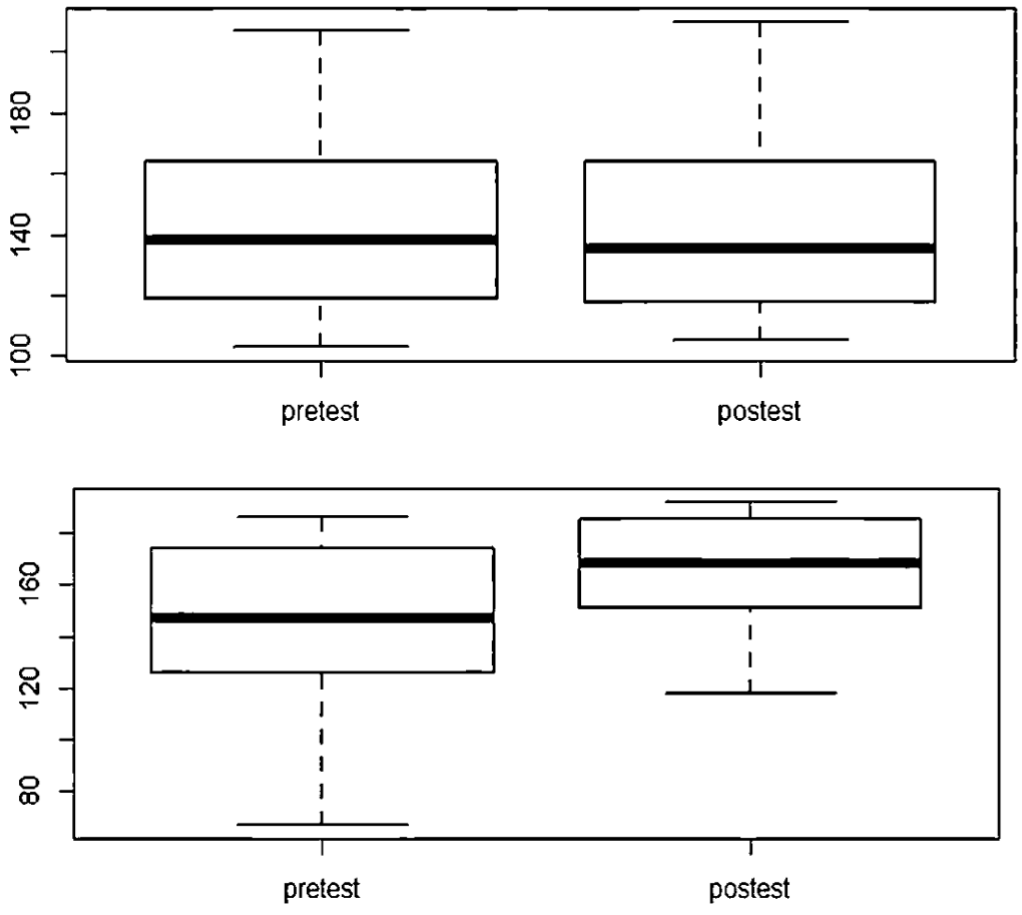
Comparison of related samples via Student's t test

	M	n	sd	t	df	p-values
Pretest Control	144.27	15	32.361	1.08	14	.148
Posttest Control	143.27	15	32.135			
Pretest Experimental	143.47	15	37.384	-5.51	14	.001**
Posttest Experimental	163.6	15	24.278			

Note. M = mean; n = number; sd = standard deviation; df = degrees of freedom; * = p<0.05; ** = p<0.005

Figure 1

Box plot of the pretest and posttest scores of the control group and experimental group

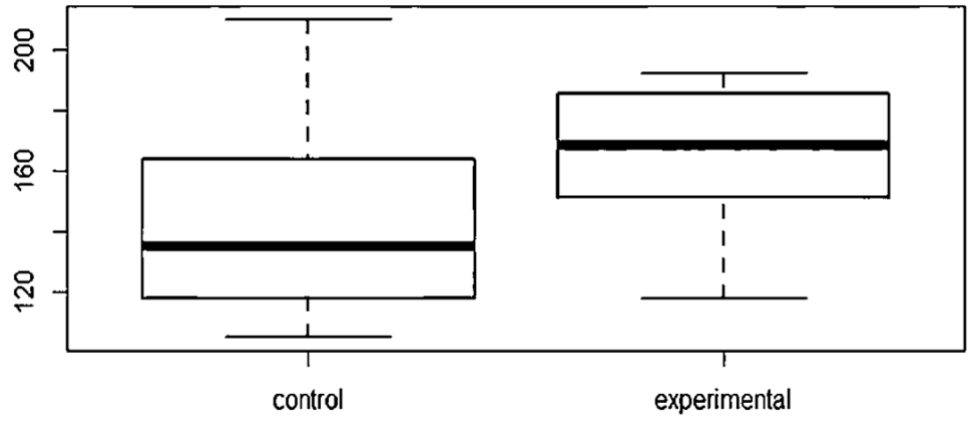


Similarly, Figure 1 presents a box plot of the pretest and posttest scores of the control group and experimental group. The control group showed similar levels of PW in both the pretest and the posttest. On the other hand, the PW of the experimental group significantly increased from the values obtained prior to receiving the intervention program in the posttest.

Figure 2 shows the difference in PW between the control group and the experimental group once the experimental group received the contextual therapy-based intervention program.

Figure 2

Box plot of the difference in posttest scores between the control and experimental groups



Discussion

This study aimed to identify the levels of psychological well-being (PW) among nursing professionals, relate the PW levels of the experimental group postintervention to sociodemographic variables and evaluate the efficacy of a contextual therapy-based intervention program to increase PW among nursing professionals (NPs) in the North Cuenca District of the Ministry of Public Health. The results of this study highlight a significant finding: the implementation of the Dialectical Behavioural Skills Training (DBT) programme led to a notable increase in PW in the experimental group, in contrast to the control group, whose levels remained relatively stable. This discovery underscores the importance of considering specific interventions, such as the DBT programme, to address the emotional challenges experienced by NPs in their work environment.

Furthermore, a significant relationship was identified between the type of contract and the PW level once the intervention program concluded in the experimental group, suggesting that the type of contract may influence how NPs in Cuenca health centers benefit from the intervention program.

This study contributes to the growing body of literature investigating the effectiveness of contextual therapy intervention techniques in diverse populations. Linehan (2015) noted that DBT skills can enhance coping, stress management, and interpersonal relationships, even in those without clinical mental disorders. Wyatt et al. (2023) assert that emotional regulation is a fundamental target in contemporary evidence-based treatments, as learning to regulate emotions helps individuals deal with stress, improve interpersonal relationships, and make informed decisions, ultimately contributing to emotional well-being and quality of life. Additionally, Tan et al. (2022) highlighted that group DBT sessions allow members to learn from each other and practice skills in interpersonal situations, facilitating the immediate application of what is learned.

Although previous studies have investigated the effectiveness of this approach in improving the PW of NPs (Kim et al., 2019; Wu et al., 2023), these studies have focused on the individual application of specific skills, such as mindfulness or assertive communication techniques. In this context, this research adopted a holistic approach encompassing a set of four fundamental skills: distress tolerance, mindfulness, emotional regulation, and interpersonal effectiveness. Contextual therapies have proven effective in improving psychological well-being. Several studies have indicated that incorporating multiple skills into psychotherapeutic programs can significantly reduce symptoms of depression, stress, anxiety, and sleep disturbances (Chen et al., 2021; Lu et al., 2019; Modares, 2011; Sanko et al., 2016). This enhancement in mental health facilitates decision-making and increases overall well-being levels (Fazia et al., 2023). One reason for this effect is that attentional control and shifting can mediate the impact of these interventions on participants' psychological well-being (Fazia et al., 2023). Specifically, mindfulness techniques have demonstrated effectiveness in reducing negative emotions, particularly in stressful environments. For example, nursing professionals have been able to better manage stress and anxiety through these interventions (Chen et al., 2021). Each

skill has a unique and complementary perspective that, when used together, can have a positive impact on mental and emotional health. Therefore, this study represents an innovative finding in research on the PW of NPs.

This study revealed a significant relationship between the type of contract (temporary, occasional, or permanent) and PW level in the experimental group, suggesting that the type of contract may influence the benefits that nursing professionals gain from the intervention. Working conditions, especially the insecurity associated with temporary or precarious contracts, have been linked to lower job satisfaction and higher stress (De Cuyper & De Witte, 2006) and are key social determinants of well-being (Russo & Terraneo, 2020; Sorensen et al., 2021). In this sense, contractual temporality is considered a risk factor for mental health and is associated with depressive symptoms, anxiety, emotional burnout, and suicidal thoughts (Llosa et al., 2018; Llosa et al., 2024), whereas permanent employment is perceived as a protective factor.

This phenomenon is particularly relevant in the Latin American context, where the expansion of flexible labor markets, the diminishing influence of trade unions, and the weakening of labor protections have led to new forms of employment, often at the expense of the standard employment relationship (Benach et al., 2016; Blom et al., 2018). Temporary jobs are linked to work characteristics that negatively affect mental well-being, such as job insecurity, low wages, a lack of benefits, limited training, and limited career prospects, in addition to excessive work schedule flexibility, limited union representation, and problematic labor relations (Bosmans et al., 2016). Furthermore, the type of contract impacts workload, available time for self-care, and workers' emotional state, which in turn influences both their immediate well-being and long-term mental health outcomes. Therefore, the type of contract is a key factor to consider in the design of future interventions (Isham et al., 2020).

Our study contributes to the theory of contextual therapies, emphasizing the need for therapeutic techniques applicable in both clinical settings and among the general population and professionals. Psychology in Latin America faces significant challenges, such as reliance on foreign models and social inequality, which restrict access to services tailored to the local context. The effectiveness of these therapies may be compromised by

a lack of specialized training among clinicians and supervisors, as well as cultural and contextual limitations, underscoring the importance of selecting appropriate approaches and fostering active patient collaboration (Mendoza, 2017; García-Lozano, 2024; Barletta et al., 2023). This landscape highlights the need for policies that strengthen therapist training and clinical supervision, adapting methods to the social and cultural realities of the region. The implementation of innovative training programs and practices in therapy is essential to improve mental health care in Latin America, where poverty and social exclusion hinder access to quality services (Neufeld et al., 2021).

This study presents significant limitations that impact the interpretability of the results and the generalizability of the conclusions. The sample size, with only n = 30 participants, is relatively small, potentially compromising representativeness for all NPs, particularly owing to a lack of diversity in gender representation. Furthermore, the use of nonprobabilistic convenience sampling, which is necessary due to institutional restrictions, limits the external validity of the study. Finally, the long-term sustainability of the intervention program's effects on participant outcomes was not explored, and a placebo group was not included in the experimental design.

For future research, expanding the sample size to enhance external validity is crucial. Investigating the long-term sustainability of the program would be valuable for improving the intervention method. The incorporation of qualitative research would allow a deeper exploration of the subjective experiences of NPs, with a focus on how they perceive the DBT program's impact on their day-to-day lives. This could include examining specific challenges, barriers to implementation, and the personal meaning they attach to the skills learned, providing richer insights into the program's true effectiveness and its long-term impact on well-being (Creswell & Poth, 2018). Introducing a *nonintervention group* in future studies would be advisable to accurately identify the program's effects and establish a stronger causal relationship. Addressing these recommendations will strengthen the knowledge base and contribute to the development of more effective strategies for managing the psychological well-being and quality of life of NPs.

Conclusions

Regarding the effectiveness of implementing a contextual therapy-based intervention programme on levels of psychological well-being (PW) in nursing professionals (NPs) from healthcare centers in the North Cuenca District of the MSP, the following conclusions stand out:

The intervention programme implemented in this study significantly increased the PW of the NPs. This finding contributes to the limited literature on the use of dialectical behavioural therapy (DBT) programmes in nonclinical populations. Although DBT was initially designed for clinical populations, the results of this study indicate that it can be adapted and effectively applied to NPs without a diagnosis of psychological disorders, providing them with tools to cope with stressful situations in work, family, and social life appropriately. This discovery broadens the application perspective of DBT, suggesting its utility in broader contexts of mental health care.

During the study, a statistically significant relationship was observed between the variable "type of contract" and the effectiveness of the programme. This finding suggests that certain contractual aspects may influence the receptivity and benefits of the programme, providing relevant information for future interventions.

Given the effectiveness of the intervention programme, the MSP could consider implementing this model in its new NPs to help prevent the onset of stress-related symptoms and, thus, improve patient care, the work environment, and contribute to achieving quality public healthcare. This, ultimately, can benefit society as a whole.

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