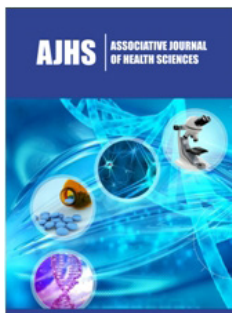


Tidal Model, Mindfulness, and Music Therapy to Minimize Exacerbations of Borderline Personality Disorder

Erika Carrasquillo, PhD, DNP, MSN . FNP*

Assistant Professor, University of Puerto Rico-Humacao, Puerto Rico

ISSN: 2690-9707



***Corresponding author:** Erika Carrasquillo, Assistant Professor, University of Puerto Rico, Urb Rio Grande States calle princesa Carolina 11519, Rio Grande Puerto rico 00745, Humacao, Puerto Rico

Submission: 📅 March 04, 2024

Published: 📅 March 14, 2024

Volume 3 - Issue 1

How to cite this article: Erika Carrasquillo*. Tidal Model, Mindfulness, and Music Therapy to Minimize Exacerbations of Borderline Personality Disorder. *Associative J Health Sci.* 3(1). AJHS. 000555. 2024.
DOI: [10.31031/AJHS.2024.03.000555](https://doi.org/10.31031/AJHS.2024.03.000555)

Copyright@ Erika Carrasquillo, This article is distributed under the terms of the Creative Commons Attribution 4.0 International License, which permits unrestricted use and redistribution provided that the original author and source are credited.

Abstract

Borderline Personality Disorder patients are described as being impulsive, unpredictable, explosive, and difficult to keep in pharmacological or therapeutic treatments. There is scarce research examining the prevalence and treatment of BPD in Puerto Rican women residing in the Commonwealth of Puerto Rico. Therefore, knowledge of factors exacerbating BPD traits in Puerto Rican women and innovative treatments for their recovery is crucial for mental health professionals.

This quantitative quasi-experimental research was primarily aimed to synthesize pertinent current knowledge related to Barker's Tidal Model recovery approach and its effects in reducing exacerbation traits of BPD in women. Likewise, it intended to determine the level of knowledge of mental health nurses regarding the Tidal Model, Music Therapy, and Mindfulness to minimize exacerbations of BPD in clinical scenarios. The integration of the Tidal Model, Mindfulness, and Music Therapy were presented as an innovative preferred treatment for BPD Puerto Rican women patients and are the core components of the recovery treatment for BPD in Puerto Rican women discussed in this study.

The research is based on literature which asserts that the Tidal Model, mindfulness, and Music Therapy may be effective in the recovery of BPD individuals [1-7], Faress et al (2019), Saglini (2019). By means of the Tidal Model implementation, mental health patients have an opportunity to express their lived human experiences and mental problems as stories and metaphors that allow them to handle their mental dysfunctions creatively. Likewise, Meditation and Music Therapy have been found to be helpful in improving dysfunctional behaviors, cognition, and working memory. After the administration of a pretest and a posttest to mental health nurses, they expressed a lack of knowledge in relation to The Tidal Model, Mindfulness, and Music Therapy in the treatment of BPD patients. However, after discussing the educational material *The Tidal Model, Mindfulness, and Music Therapy in the treatment of BPD in women-training module for nurses*, they stated feeling more knowledgeable and motivated.

Keywords: Borderline Personality Disorder (BPD); Commonwealth of Puerto Rico; Tidal model; Music therapy; Mindfulness; Exacerbation of BPD traits

Introduction

Patients with borderline personality disorder are characterized by personality instability and ambivalence in virtually all areas of their lives. They are impulsive, unpredictable, and often explosive; therefore, it is difficult for them to follow therapeutic prescriptions and adhere to therapy or pharmacological prescriptions. For this reason, it is of great importance to combine therapies, i.e., alternative therapies that increase introspection and self-control [8]. According to the definition given by the American Psychiatric Association [9] in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5 and DSM-5-TR), a Personality Disorder (PD) is a pattern that is continuous and rigid, internal thoughts and behavior is markedly different from the expectations of the individual's culture, is pervasive and inflexible usually beginning in adolescence or early adulthood and causes discomfort or disability.

An estimated 1.4% of the adult population in the United States experience Borderline Personality Disorder (BPD). Furthermore, almost 75% of people diagnosed with BPD are women [10]. Interventions to minimize exacerbations of borderline personality disorder

traits in women are critical. Therefore, developing a study where the effectiveness of some therapeutic interventions can be validated to reduce exacerbation behaviors or symptoms in this group of female patients is crucial. The findings will contribute to scientific and clinical approaches leading to the development of new nursing programs for preventing and treating this disorder. The program will be based on The Tidal Model and Mindfulness and Music Therapy interventions.

Research questions

- A. What interventions significantly minimize (I) exacerbations of borderline personality disorder trait symptoms(O) in women? (P)
- B. How effective is the combination of therapeutic interventions Tidal Model, Music Therapy, and Guided Meditation (I) in significantly minimizing exacerbations of borderline personality disorder symptoms (O) in women? (P).

Research objectives

- A. Analyze which are the interventions that significantly minimize exacerbations of symptoms of borderline personality disorder traits in women.
- B. To determine the effectiveness of the combination of therapeutic interventions, the Tidal Model, Music Therapy, and Guided Meditation significantly minimize exacerbations of symptoms of borderline personality disorder traits in women.
- C. Evaluate the level of knowledge of healthcare providers regarding the objectives of implementing the therapeutic interventions.

Problem statement

Women are considered to have the highest risk of developing borderline personality disorder. 75-80% of the population diagnosed with BPD are women [11], and up to 80% experience emotional pain as an adaptive response to repetitive traumatic experiences during childhood (Zanarini et al., 1997). In addition, young women with BPD have a suicide rate of 800 times greater than the public [12].

Data suggest that BPD affects the general population from 1.2% to almost 6%. Moreover, up to 10% of those who meet the criteria for BPD eventually commit suicide; this rate is 50 times that observed in the broader population (American Psychiatric Association, 2001). Thus, BPD is associated with tremendous emotional and financial burdens to individuals, families, and society. The understanding of factors underlying the exacerbation of BPD traits in Puerto Rican women living in the Commonwealth of Puerto Rico, as well as of new treatments for their recovery, is crucial for mental health professionals, mainly due to the scarcity of research examining the prevalence and treatment of BPD in Puerto Rican women living in the Commonwealth of Puerto Rico.

Purpose of the study

The primary purpose of this study is to synthesize relevant current knowledge about the effects that Phil Baker's recovery model may have in reducing the exacerbation of symptoms of

borderline disorder personality traits in women in combination with music therapy and guided Meditation. Tidal Model, developed by Barker (2011), is the recovery approach for mental health and psychiatric nursing patients that allows them to express their mental problems and expose them as a story.

Theoretical Framework

The Tidal Model, as well as Music Therapy and Mindfulness, are valuable tools in the treatment of mental health patients [1-7], Farres et al (2019) & Sagligi, (2019). The integration of these therapies in this practice change project may help in the treatment and recovery of BPD patients who, according to the Diagnostic and Statistical Manual of Mental Disorders 5 (2013), are described as presenting highly dysfunctional and irrational behavior leading to a catastrophic life characterized by instability, low self-image, and impulsivity. Moreover, this disorder has been labeled as difficult to understand and treat, and because patients usually do not respond to therapy, keeping them in treatment is very challenging [13]. The incorporation of The Tidal Model, Music Therapy, and Mindfulness as complementary therapies may be effective in the recovery of BPD individuals by reducing the exacerbation of symptoms of borderline personality disorder, specifically in women.

Mindfulness

Mindfulness has become a popular intervention strategy for mental health disorders. Several techniques have been studied, and the advantages and disadvantages of their implementation have been discussed. Mentalization-based-treatment has been used in therapy for the treatment of different mental disorders, although initially developed for BPD. It has been used in family therapy, school settings, and social groups, as stated by Bateman & Fonagy [14]. As discussed by Shonin & Van Gordon [15], mentalization focuses on improving individuals' biological, mental, social, and spiritual aspects. They summarize evidence-based proposals found in the literature. The proponents of this intervention model summarize it as a range of therapeutic techniques, including Yoga, group discussion, and one-to-one discussion, among others. However, opponents indicate that all effective BPD therapies have mentalizing components. They argue that due to the patient's vulnerability, they might lose mentalization when experiencing severe stress, as stated [14].

Mindfulness includes aspects linked to attention, awareness, and being non-judgmental; however, some studies identify different facets due to specific and differing relations to outcomes (Didona et al., 2018). Therefore, according to Didona (2018), it is multifaceted and has positive aspects such as self-monitoring of attention and awareness, acceptance, and perceptibility to experience the here and now. Moreover, mindfulness fosters internal. Experience that helps individuals to accept thoughts simply as thoughts instead of an irrefutable reflection of reality.

Music therapy

Music has been used in conjunction with mentalization as a complementary therapy for patients with BPD [16]. They discuss a pilot study using a theoretical model integrating Mentalization-Based-Treatment (MBP) into music therapy. Part of the rationale

for using this Model is that the implicit or preverbal level of treatment is positively increased with the shift from verbal to musical, thus contributing to the development of an engaging interaction; however, stimulation transference and breakdown may occur. Consequently, the music therapist must balance introducing and exploring music to promote mentalization. They created a structured Program and Training Manual (PROMT) to implement the Model and reported a positive outcome, yet it is being revised. Coupled with other studies, Hunter [17] concluded that BPD patients who have developed Cardiometabolic Syndrome (CMS) resulting from their impulsive way of life may benefit from music therapy focused on therapists composing music and simple songs as advice which act as carriers to the brain processing centers. Therefore, healthy cognitive abilities are not necessary.

Sample and setting

The DNP project was carried out at a care facility center in the east area of Puerto Rico. The outcome of interest was: Did the education training program on the Tidal Model, Mindfulness, and Music Therapy for BPD exacerbations in women with borderline personality disorder for healthcare providers increment their knowledge about treatment and recovery of BPD traits in young women?

Instrumentation

The researcher implemented a protocol in which the questionnaire was handed to them once the participants agreed to participate in the study. With this questionnaire, the participant's level of knowledge of music therapy, mindfulness, and Tidal model interventions was tested [18-25]. The instrument was created by the researcher and consisted of two parts. The first measured social demographic data. With a total of nine items. The second part evaluated the level of knowledge on music, mindfulness, and tidal model interventions. Consists of eighteen items.

Data collection

The researcher was granted permission by the Nursing Director of the care facility center to conduct the study at the center. The eligible participants were evaluated based on the inclusion criteria. The study and the written consent were explained in detail. After the participant signed the consent, the document was stored in a locked cabinet that the researcher owned. Afterward, the questionnaires were to be administered. An ID was created using two letters and four numbers. Rigorous measures were taken to protect the data, and personal information will not be accessible without the code created. The only person who will know is the participant.

Data analysis

Descriptive statistics were used to examine the variables of the study. Variables include knowledge of BPD exacerbations in women, the tidal Model, Mindfulness, and Music Therapy. The researcher used IBM SPSS Statistics version 28 to create a codebook using the questionnaire's variables and information. With the IBM SPSS Statistics version 28, a paired samples t-test was done [26-30].

Human rights and ethical considerations

In every study, authors must report on their research's

ethical considerations. Ana G. Mendez University Online Campus requires the City Program Research modules, which the researcher completed satisfactorily as part of its DNP program. The researcher must present to Ana G. Mendez University Online Campus, Institutional Review Board (IRB); once the IRB approves the study, the researcher begins the study. All these processes ensure the ethics and quality of the study. The informed consent contained anonymous data stored in a locked cabinet, and the participants in the research had the right of access and confidentiality.

Data Analysis

The questionnaire titled *The Nurse's Knowledge about the Effects of the Tidal Model, Music Therapy, and Mindfulness in Reducing the Exacerbation of Symptoms of Borderline Personality Disorder (BPD) Traits in Puerto Rican Women* was administered to 33 participants. The instrument was administered as a pretest to explore their knowledge about the Tidal Model, Mindfulness, and Music Therapy [31-36]. It was given as a posttest to verify if they had gained the understanding that would enable them to implement the integration of the approaches. Of the 33 participants, only 78.8% (n=26) completed the pre and posttest) only the participants completed the posttest posttest) completed the pretest only see Table 1. In Table data collected, it was observed that 63.6% of the participants were women and 36.4% were men, see Table 2. Approximately half of the participants were between the ages of 46 to 65 years (n=17, 51.5%), followed by those aged 36 to 45 years (n=9, 27.3%) and those aged 21 to 35 years (n=5, 15.2%) (Table 3). 39.4% (n=13) of participants have a doctorate, 36.4% (n=12%) have a master's degree, 18.2% (n=6) have a bachelor's degree, and 6.0% have an associate degree (n=1) or another degree (n=1), see Table 4 & Figure 1.

Table 1: A response rate of the study participants.

Test Type	Frequency	Percent (%)
Pretest	1	3
PosttestPosttest	6	18.2
Pre and PosttestPosttest	26	78.8
Total	33	100

Table 2: Gender of the study participants.

Gender	Frequency	Percent (%)
Female	21	63.6
Male	12	36.4
Total	33	100

Table 3: Age category of the study participants.

Age	Frequency	Percent (%)
21-35	5	15.2
36-45	9	27.3
46-65	17	51.5
66 years or more	1	3
Missing data	1	3
Total	33	100

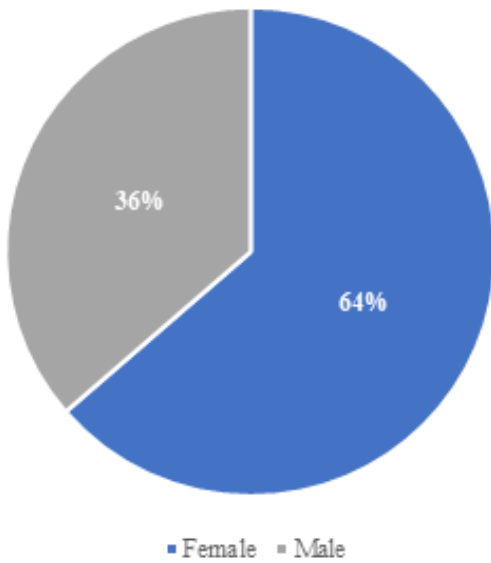


Figure 1: Gender of the study participants.

Table 4: Academic background of the participants in the study.

Education	Frequency	Percent (%)
Associate	1	3
Bachelor	6	18.2
Master	12	36.4
Doctorate	13	39.4
Other	1	3

30.3% (n=10) of the participants in this study have 26 years of experience or more in the nursing profession, 18.2% (n=6) have 11 to 15 years of experience, 21.2% (n=7) have 11 to 15 years of experience, 15.2% (n=5) have 6 to 10 years of experience, 9.1% (n=3) have 16 to 20 years of experience and 6.1% (n=2) have 1 to 5 years of experience (Figure 2). See Table 5. 39.4% (n=13) of participants in this study have 1 to 5 years of experience working with Puerto Rican female patients with BPD disorder, 24.2% (n=8) have less than a year, 18.2% (n=6) have 6 to 10 years, 12.1% (n=4) have 11 to 15 years of experience and 3.0% (n=1) have 16 to 20 years, see Table 6, Figures 3 & 4.

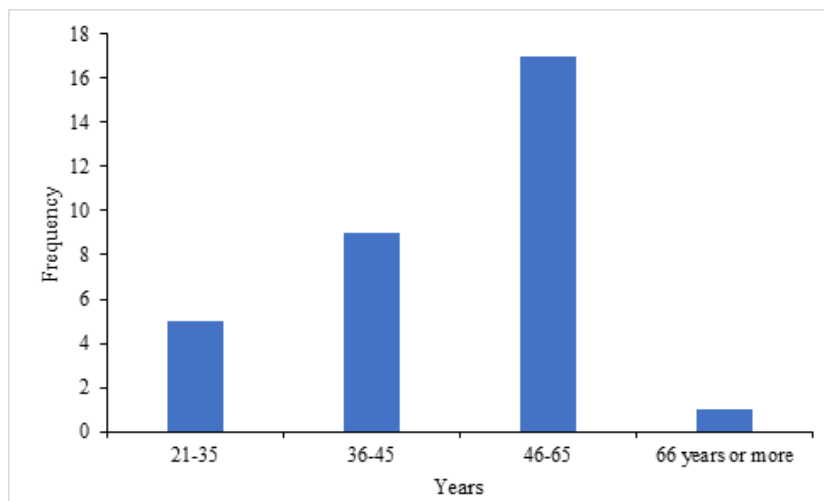


Figure 2: Age category of the study participants.

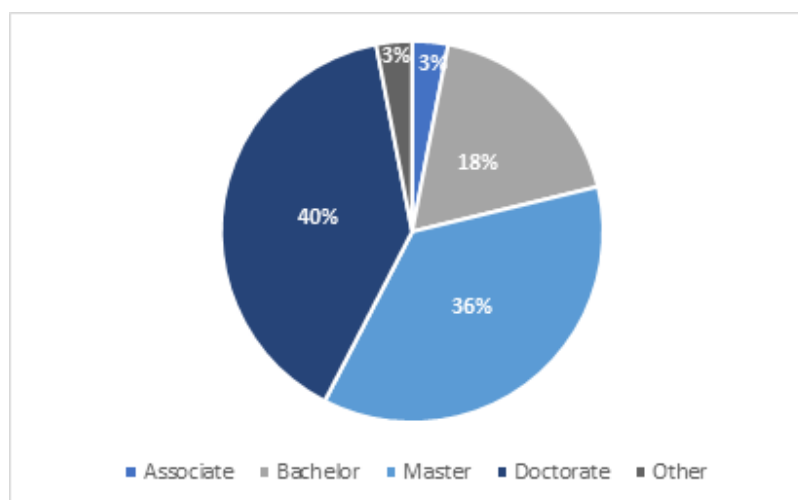


Figure 3: Academic background of the study participants.

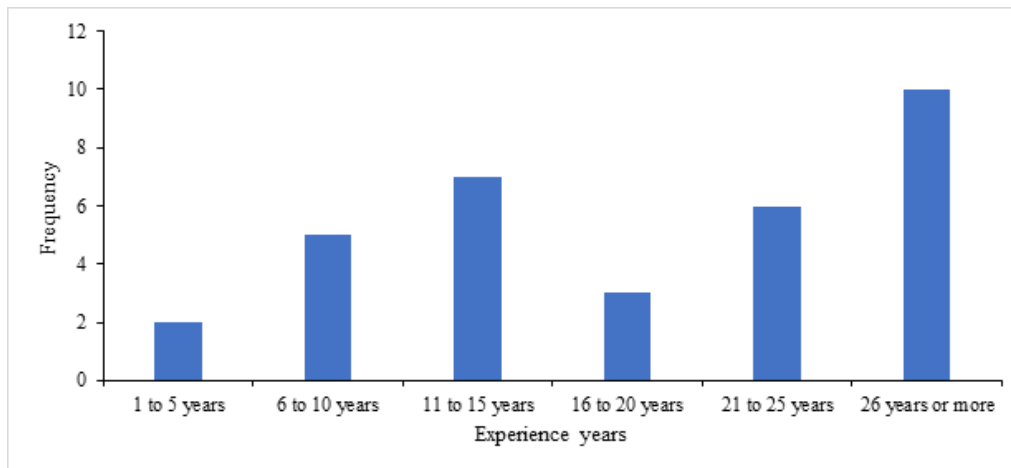


Figure 4: Years of experience in the nursing profession.

Table 5: Years of experience in the nursing profession.

Years of experience	Frequency	Percent (%)
1 to 5 years	2	6.1
6 to 10 years	5	15.2
11 to 15 years	7	21.2
16 to 20 years	3	9.1
21 to 25 years	6	18.2
26 years or more	10	30.3
Total	33	100.0

Table 6: Years that study participants have been working with Puerto Rican female patients with BPD disorder.

Years working	Frequency	Percent (%)
Less than a year	8	24.2
1 to 5 years	13	39.4
6 to 10 years	6	18.2
11 to 15 years	4	12.1
16 to 20 years	1	3.0
Total	33	100.0

In the pretest, when asked if they were familiar with the Tidal Model, Music Therapy, and Mindfulness approaches, 45.5% answered :("no" n=13 and "do not know" n=2), and 36.4% (n=12) of the participants indicated they were familiar with the Tidal Model, Music Therapy, and Mindfulness approaches. 60.6% (n=20) of the participants indicated they had not participated in any previous training or continuing education related to Tidal Model, Music Therapy, or Mindfulness. 33.3% (n=11) of the participants indicated they think that the Tidal Model, Music Therapy, and Mindfulness could help Puerto Rican women BPD patients create their journey of discovery; the rest of the participants indicated "no" (n=9, 27.3%) and "do not know" (n=7, 21.2%). 39.4% (n=13) of the participants

indicated they think that implementing the Tidal Model, Music Therapy, and Mindfulness may be convenient for Puerto Rican women patients with BPD; the rest of the participants indicated "no" (n=8, 24.2%), and "do not know" (n=6, 18.2%). 42.4% (n=14) of the participants answered that the Tidal Model, Music Therapy, and Mindfulness implementation could be an adequate treatment option for Puerto Rican female patients with BPD; the rest of the participants indicated "no" (n=8, 24.2%) and "do not know" (n=3, 15.2%). 39.4% (n=13) of the participants indicated they think the Tidal Model, Music Therapy, and Mindfulness will contribute to the assessment of Puerto Rican female patients with BPD; the rest of the participants indicated "no" (n=8, 24.2%), and "do not know" (n=6, 18.2%).

39.4% (n=13) of the participants answered that the Tidal Model, Music Therapy, and Mindfulness might help nurses learn more about other treatment modalities for Puerto Rican female patients with BPD; the rest of the participants indicated "no" (n=8, 24.2%) and "do not know" (n=6, 18.2%). 30.3% (n=10) of the participants indicated that the Tidal Model, Music Therapy, and Mindfulness implementation might help Puerto Rican women patients with BPD develop communication skills; the rest of the participants answered, "do not know" (n=10, 30.3%) and "no" (n=6, 18.2%). 39.4% (n=13) of the participants pointed out that the Tidal Model, Music Therapy, and Mindfulness implementation may increase motivation and learning abilities in Puerto Rican women patients with BPD; the rest of the participants responded "no" (n=8, 24.2%) and "do not know" (n=5, 15.2%). 27.3% (n=9) of the participants indicated that the Tidal Model, Music Therapy, and Mindfulness implementation might help Puerto Rican women patients with borderline personality disorder participate more actively in activities related to treatment; the rest of the participants answered "no" (n=8, 24.2%) and "do not know" (n=8, 24.2%) (Table 7).

Table 7: Pretest.

Years of experience	Frequency	Percent (%)
1. Do you know the Tidal Model, Music Therapy, and Mindfulness technique?		
Yes	12	36.4
No	13	39.4
Do not know	2	6.1
Missing data	6	18.2
2. Have you taken previous training or continuing education related to the Tidal Model, Music Therapy, and Mindfulness?		
Yes	7	21.2
No	20	60.6
Missing data	6	18.2
3. Does the primary goal of the Tidal Model, Music Therapy, and Mindfulness help Puerto Rican women patients with BPD to create their journey of discovery?		
Yes	11	33.3
No	9	27.3
Do not know	7	21.2
Missing data	6	18.2
4. Is the application of the Tidal Model, Music Therapy, and Mindfulness functional in Puerto Rican women patients with BPD?		
Yes	13	39.4
No	8	24.2
Do not know	5	15.2
Missing data	7	21.2
5. Could the Tidal Model, Music Therapy, and Mindfulness implementation be a treatment for Puerto Rican women patients with BPD?		
Yes	14	42.4
No	8	24.2
Do not know	5	15.2
Missing data	6	18.2
6. Will the Tidal Model, Music Therapy, and Mindfulness help during the assessment of Puerto Rican women patients with BPD?		
Yes	13	39.4
No	8	24.2
Do not know	6	18.2
Missing data	6	18.2
7. Does the Tidal Model, Music Therapy, and Mindfulness help the nurse to learn more about other treatment modalities for Puerto Rican women patients with BPD?		
Yes	13	39.4
No	8	24.2
Do not know	6	18.2
Missing data	6	18.2
8. Will the Tidal Model, Music Therapy, and Mindfulness implementation help Puerto Rican female patients with BPD develop communication skills?		
Yes	10	30.3
No	6	18.2
Do not know	10	30.3
Missing data	7	21.2
9. Does the Tidal Model, Music Therapy, and Mindfulness implementation increase motivation and learning abilities for Puerto Rican women patients with BPD?		
Yes	13	39.4
No	8	24.2
Do not know	5	15.2
Missing data	7	21.2

10. Do you think that the Tidal Model, Music Therapy, and Mindfulness implementation help Puerto Rican women patients with borderline personality disorder to be more active during activities related to treatment?		
Yes	9	27.3
No	8	24.2
Do not know	8	24.2
Missing data	8	24.2

In the posttest, when participants were asked if they were familiar with the Tidal Model, Music Therapy, and Mindfulness approaches, 90.9% (n=30) indicated that they were familiar with these approaches, and 6.1% (n=2) of the participants indicated that they were not familiar [37-41]. 81.8% (n=27) of the participants indicated they had taken previous training or continuing education related to the Tidal Model, Music Therapy, and Mindfulness; on the other hand, 12.1% of the participants indicated they had not taken any training or participated in any continuing education related to the Tidal Model, Mindfulness, or Music Therapy. They answered: “no” n=3 and “do not know” n=1. 84.8% (n=28) of the participants indicated they think that the Tidal Model, Music Therapy, and Mindfulness approaches may help Puerto Rican women patients with BPD create their journey of discovery; on the contrary, 9.1%(n=3) of the participants answered, “do not know.” 84.8% (n=28) of the participants pointed out that implementing the Tidal Model, Music Therapy, and Mindfulness is functional in Puerto Rican women patients with BPD; however, 9.1% of the participants answered, “do not know” (n=3). 87.9% (n=29) of the participants indicated that the Tidal Model, Music Therapy, and Mindfulness implementation could be an adequate treatment for Puerto Rican women patients with BPD. On the other hand, the rest of the participants answered, “do not know” (n=2, 6.1%) and “No” (n=1, 3.0%) to this question.

87.9% (n=29) of the participants indicated they consider that the Tidal Model, Music Therapy, and Mindfulness will help during the assessment of Puerto Rican women patients with BPD. In contrast, the rest of the participants answered, “Do not know” (n=2, 6.1%) and “No” (n=1, 3.0%). 90.9% (n=30) of the participants indicated that the Tidal Model, Music Therapy, and Mindfulness might help nurses learn more about other treatment modalities for Puerto Rican women patients with BPD; conversely, the rest of the participants answered, “do not know” (n=1, 3.0%) and “no” (n=1, 3.0%) to this question. 81.8% (n=27) of the participants indicated they think the Tidal Model, Music Therapy, and Mindfulness implementation will help Puerto Rican women patients with BPD develop communication skills, while 15.2% answered “do not know” (n=5). 87.9% (n=29) of the participants indicated they consider that the Tidal Model, Music Therapy, and Mindfulness implementation increases motivation and learning abilities for Puerto Rican women patients with BPD; the rest of the participants answered, “do not know” (n=2, 6.1%) and “no” (n=1, 3.0%) to this question. 87.9% (n=29) of the participants indicated they consider the Tidal Model, Music Therapy, and Mindfulness implementation may help Puerto Rican women patients with borderline personality disorder to be more active during activities related to treatment; the rest of participants answered, “do not know” (n=2, 6.1%) and “no” (n=1, 3.0%) to this question (Table 8).

Table 8: Posttest.

Years of experience	Frequency	Percent (%)
1. Do you know the Tidal Model, Music Therapy, and Mindfulness technique?		
Yes	30	90.9
No	2	6.1
Do not know	0	0
Missing data	1	3
2. Have you taken previous training or continuing education related to Tidal Model, Music Therapy, and Mindfulness?		
Yes	27	81.8
No	3	9.1
Do not know	1	3
Missing data	2	6.1
3. Does the primary goal of the Tidal Model, Music Therapy, and Mindfulness help Puerto Rican women patients with BPD to create their journey of discovery?		
Yes	28	84.8
No	0	0
Do not know	3	9.1
Missing data	2	6.1
4. Is the application of the Tidal Model, Music Therapy, and Mindfulness functional in Puerto Rican women patients with BPD?		
Yes	28	84.8
No	0	0

Do not know	3	9.1
Missing data	2	6.1
5. Is the Tidal Model, Music Therapy, and Mindfulness implementation functional for Puerto Rican women patients with BPD?		
Yes	29	87.9
No	1	3
Do not know	2	6.1
Missing data	1	3
6. Will the Tidal Model, Music Therapy, and Mindfulness help during the assessment of Puerto Rican women patients with BPD?		
Yes	29	87.9
No	1	3
Do not know	2	6.1
Missing data	1	3
7. Does the Tidal Model, Music Therapy, and Mindfulness help the nurse to learn more about other treatment modalities for Puerto Rican women patients with BPD?		
Yes	30	90.9
No	1	3
Do not know	1	3
Missing data	1	3
8. Will the Tidal Model, Music Therapy, and Mindfulness implementation help Puerto Rican female patients with BPD develop communication skills?		
Yes	27	81.8
No	0	0
Do not know	5	15.2
Missing data	1	3
9. Does the Tidal Model, Music Therapy, and Mindfulness implementation increase the motivation and learning abilities of Puerto Rican women patients with BPD?		
Yes	29	87.9
No	1	3
Do not know	2	6.1
Missing data	1	3
10. Do you think that the Tidal Model, Music Therapy, and Mindfulness implementation help Puerto Rican women patients with borderline personality disorder to be more active during activities related to treatment?		
Yes	29	87.9
No	1	3
Do not know	2	6.1
Missing data	1	3

Project Results

This study intended to analyze innovative therapeutic interventions that could significantly reduce exacerbations of BPD symptoms in Puerto Rican women. Accordingly, the effectiveness of the combination of the Tidal Model, Music Therapy, and Guided Meditation were considered as options for the recovery of these patients. Based on the Tidal Model, recovery approach, psychiatric and mental health patients have an opportunity to express their mental problems by exposing them as a story that they tell in sentences using metaphors that allow them to manage their mental dysfunctions creatively [42-45].

Furthermore, this is the starting point in helping them take control of their lives, which is critical for BPD patients [2]. Combining the Tidal Model with Mindfulness, Music Therapy, and pharmacological treatment may augment introspection and

self-regulation in these individuals [8]. Thus, nurses treating BPD patients must be trained in treatment options to contribute to their recovery. Hence, this nontraditional approach offers an opportunity for implementing an innovative approach to contribute to their recovery by helping BPD patients control their emotional dysregulation and take responsibility for their treatment. For this purpose, an educational module based on the pretest's findings and an extensive literature revision were prepared.

Summary of Results

Nurses were administered the questionnaire. *The nurse's knowledge about the effects of the Tidal Model, Music Therapy, and mindfulness in reducing the exacerbation of symptoms of borderline personality disorder (BPD) traits in Puerto Rican women as pretest and posttest.* After administering the instrument as a pretest to these mostly experienced nurses, most of them holding

a master's or a doctoral degree and 63% female, findings indicate that they lacked knowledge about the Tidal Model, Mindfulness, and Music Therapy. Therefore, they needed the tools to evaluate the usefulness of the combination of these approaches in treating BPD in women.

After discussing the educational material *using The Tidal Model, Mindfulness, and Music Therapy in the treatment of BPD in women- training module for nurses*, they expressed they felt more knowledgeable about these therapeutic approaches and were motivated to use them in the treatment of BPD in women, and considered the use of The Tidal Model in conjunction with Mindfulness and Music Therapy could be an appropriate treatment option to help BPD female patients in their journey to recovery. In conclusion, they were motivated to use it in the treatment of BPD in women [46-52].

Practice Recommendation

Based on the results of this study, recommendations about nurses' education and training, mental health interventions, and nursing practice are presented. Regarding nurses' education, the Tidal Model, Music Therapy, and Mindfulness should be part of the training and new educational programs for mental health nurses, especially with an emphasis on implementing the Tidal Model in conjunction with Music Therapy and Mindfulness programs focused on treating BPD traits.

Nurses' mental health interventions and nursing practice are crucial for successfully implementing this innovative approach. Accordingly, various recommendations are presented in this study. In the first place, relationships between the female Puerto Rican BPD patients and the mental health nurses must be one in which the mental health nurses develop a partnership with the Puerto Rican BPD women patients based on the Tidal Model coping skills related to stress, regulation of emotions, and improvement of interpersonal relationships. This relationship will be of great importance for helping BPD patients overcome low self-image, extremely rigid thinking, and emotional dysregulation by helping them express their personal stories of extreme distress, anxiety, or pain, thus contributing to assisting them in their process of recovery and taking control over their lives.

Furthermore, relationships between the female Puerto Rican BPD patients and the mental health nurses must be focused on experiences in which the mental health professional implements mindfulness interventions to improve the regulation of emotions. Likewise, implementing Music Therapy interventions to help BPD patients develop a healthy self-concept and decrease emotionality must be integral to this nursing practice approach [1]. Mental health nurses, especially those working in settings where this innovative approach is implemented as a treatment for Puerto Rican BPD women patients, must be rigorously trained to ensure achievements in the treatment. Moreover, research to obtain data about experiences related to the implementation of this innovative approach for reducing exacerbations of BPD in Puerto Rican female patients must be developed.

Conclusion

This practice change project aimed to study an innovative approach in the treatment of BPD in Puerto Rican women by synthesizing relevant knowledge about Phil Baker's recovery model and its effects in reducing the exacerbation of borderline personality disorder traits in women in conjunction with Music Therapy and guided mindfulness. The combination of the Tidal Model, Mindfulness, and Music Therapy was presented as a preferred treatment for exacerbations of this disorder. The nurses participating in the study gained knowledge and understanding about the Tidal Model, Mindfulness, and Music Therapy as tools to treat BPD patients and integrate these therapies in the treatment and recovery process.

Likewise, they were willing to gain knowledge concerning this new approach and were motivated to help female Puerto Rican BPD patients in their path to recovery.

References

1. Kenner J, Baker FA, Treloyn S (2020) In group music therapy, perspectives on musical competence for people with borderline personality disorder in group music therapy. *Journal of Music Therapy* 29(3): 271-287.
2. Barker P (2001) The tidal model: Developing a person-centered approach to psychiatric and mental health nursing. *Perspectives in Psychiatric Care* 37(3): 79-87.
3. Didona F, Ross C, Clarissa F, Luca I, Laura P, et al. (2019) Relations of mindfulness facets with psychological symptoms among individuals with a diagnosis of obsessive-compulsive disorder, major depressive disorder, or borderline personality disorder. *Psychol Psychother* 92(1): 112-130.
4. Trichal M, Kumar P (2020) Efficacy of mindfulness exercises in the management of borderline personality disorder. *The International Journal of Indian Psychology* 8(3): 1089-1100.
5. Sache S, Keville S, Feigenbaum J (2011) A Feasibility study of mindfulness-based cognitive therapy for individuals with borderline personality disorder. *Psychology and Psychotherapy: Research and Practice* 84(2): 184-200.
6. Peggilee W, Melissa F, David HK, Matthias B, Jeannie BW (2013) Borderline personality features and harmful and dysregulated behavior: The mediational effect of mindfulness. *Journal of Clinical Psychology* 69(9): 903-911.
7. Chafos V, Economou P (2014) Beyond borderline personality disorder: The mindful brain. *Social Workers* 59(4): 297-302.
8. Crespo DE (2022) Advances in research on borderline personality disorder. Study of subtypes and their response to treatment. Doctoral dissertation, Universitat Jaume I, Spain.
9. American Psychiatric Association (2022) DSM 5-TR: diagnostic and statistical manual of mental disorders, (5th edn), American Psychiatric Association, Washington DC, USA.
10. National Alliance on Mental Illness (2017) *Borderline Personality Disorder*.
11. Stuart GW (2013) *Principles and practice of psychiatric nursing* (10th edn), Mosby Inc, Elsevier, St Louis, Missouri, USA.
12. Holm AL, Severinsson E (2008) The emotional pain and distress of borderline personality disorder: A review of the literature. *International Journal of Mental Health Nursing* 17(1): 27-35.
13. Psych Central (2016) *Dialectical behavior therapy in the treatment of borderline personality disorder*.

14. Bateman A, Fonagy P (2013) Mentalization-based treatment. *Psychoanalytic Inquiry* 33(6): 595-613.
15. Shonin E, Grdon W (2016) The mechanism of mindfulness in the treatment of mental illness and addiction. *Int Ment Health Addiction* 14: 844-849.
16. Hanabal (2019) A pilot study is investigating research design feasibility using pre-post measures to test the effect of music therapy in psychiatry with people diagnosed with personality disorders. *Voiced. A World Forum of Music Therapy* 19(1).
17. Ester H (2021) Music as a treatment for people living with borderline personality disorder who have developed cardiometabolic syndrome. *Psychological Applications and Trends*.
18. Barker P (2013) American psychiatric association. *Diagnostic and statistical manual of mental disorders (5th edn)*, Nurs Times, Washington DC, USA, 94: 70-72.
19. Bag B (2019) Tidal model in mental health and psychiatric nursing practices. *Current Approaches in Psychiatry* 11(4): 547-560.
20. Barker PPJ, Buchanan BP (2004) *The tidal model: A guide for mental health professionals (1st edn)*, Routledge, London, United Kingdom.
21. Biskin RS, Paris J, Renaud J, Raz A, Zerkowitz P (2011) Outcomes in women diagnosed with borderline personality disorder in adolescence. *Journal of Canadian Academy of Child and Adolescent Psychiatry* 20(3): 168-174.
22. Cahill CR, Llavero GR, Escudero DM, Fernández PG, Rodríguez FS, et al. (2021) Iatrogenesis in people diagnosed with borderline personality disorder. *Psychology* 3(12): e22.
23. Cam MO, Target EO (2019) A Model suggestion for the recovery of women exposed to violence: Tidal model. *Current Approaches in Psychiatry* 11(2): 248-256.
24. Carmona IFC, Elices M, Soler J, Elisabet DC, Ana MB, et al. (2019) Effects of mindfulness training on the default mode network in borderline personality disorder. *Clin Psychol Psychother* 26(5): 562-571.
25. Carrasquillo EM (2021) Social factors that exacerbate features of borderline personality disorder in young adult women between 25 and 35 years of age living in the commonwealth of Puerto Rico. *J Nurs Women's Health* 5: 174.
26. Chapman J, Jamil RT, Fleisher C (2022) *Borderline personality disorder*. Stat Pearls Publishing, Treasure Island, Florida, USA.
27. Cook TD, Campbell DT (1979) *Quasi-experimentation: Design and analysis issues for field settings*. Houghton Mifflin, USA.
28. Deveney R, Patterson E (2022) *Borderline personality disorder facts and statistics*.
29. Gebhard S, Kunkel M, von Georgi R (2014) The use of music for emotion modulation in mental disorders: The role of personality dimensions. *Journal of Integrative Psychology and Therapeutics* 2(5).
30. Gill D, Warburton W (2014) An investigation of the biosocial model of borderline personality disorder. *Journal of Clinical Psychology* 70(9): 866-873.
31. Haslam R, Herderscheit A, Himmerich H (2022) A systematic review of scientific studies on the effects of music in people with personality disorders. *Int J Environ Res Public Health* 19(23): 15434.
32. Hou J, Bei S, Andrew CNC, Changan S, Jiaxian Z, et al. (2017) Review on neural correlates of emotion regulation and music: Implications for emotion dysregulation. *Font Psychol* 8: 501.
33. Knefel M, Tran US, Lueger SB (2016) The association of posttraumatic stress disorder, complex posttraumatic stress disorder, and borderline personality disorder from a network analytical perspective. *Journal of Anxiety Disorders* 43: 70-78.
34. Magee WL, Clark I, Tamplin J, Bradt J (2017) Music interventions for acquired brain injury. *Cochrane Database of Systematic Reviews* 1(1): CD006787.
35. Marsden E, Torgerson CJ (2012) Single group, pre-and posttest post-test research designs: Some methodological concerns. *Oxford Review of Education* 38(5): 583-6123.
36. McFerran K, Wigram T (2005) Articulating the dynamics of music therapy group improvisations. *Nordic Journal of Music Therapy* 14(1): 33-46.
37. Medina Barrón LA (2023) Recreational music therapy in short-stay psychiatric units at CAMH.
38. Melnyk BM, Mazurek B, Fineout OE (2019) *Evidence-based practice in nursing & healthcare: A guide to best Practice (4th edn)*, Wolters Kluwer, Netherlands.
39. Nance D (2019) *The tidal Model: An alternative for psychiatric nursing. Culture of Care 3rd Semester*.
40. Pizzarello S, Taylor J (2011) Peer substance use associated with the co-occurrence of borderline personality disorder features and drug use problems in college students. *Journal of American College Health* 59(5): 408-414.
41. Polit D, Beck C (2021) *Nursing research: Generating and assessing evidence for nursing practice*. Wolters Kluwer Health, Philadelphia, Pennsylvania, USA.
42. Puerta PN (2021) Proposal for neuropsychological intervention, focused on meditation for children with attention deficit hyperactivity disorder.
43. Rao E, Broader J (2019) Borderline personality disorder and depressive disorder. *The Royal Australian & New Zealand College of Psychiatrists* 27(6).
44. Reichl C, Kaess M (2021) Self-harm in the context of borderline personality disorder. *Current Option in Psychology* 37: 139-144.
45. Savasan A, Cam O (2019) Evaluation of the twelve-month follow-up results from alcohol OAI.
46. Schulze A, Cloos L, Zdravkovic M, Stefanie L, Annegret KU, et al. (2022) On the interplay of borderline personality features, childhood trauma severity, attachment types, and social support. *Bord personal Disord Emot dysregulate* 9(1): 35.
47. Scott I, Mazhindu D (2014) *Statistics for healthcare professionals*. SAGE Publications Inc, New York, USA.
48. Solano RT, Martínez EMP (2022) Cognitive-behavioral treatment to improve interpersonal relationships in borderline personality disorder. *Revista Electrónica Entrevista Académica (REEA)* 4(10): 75-90.
49. Stepp SD, Pilkonis PA, Hipwell AE, Loeber R, Stouthamer LM (2010) Stability of borderline personality disorder features in girls. *Journal of Personality Disorders* 24(4): 460-472.
50. Talseth A, Fergertstrom L, Randi T (2014) Mental health nurses' experiences caring for patients suffering from self-harm. *Nurs Res Pract* 2014: 905741.
51. Wheeler DJ (1998) The analysis is more than descriptive statistics. *Quality* 37(3): 29-30.
52. Zimmerman M, Morgan T (2022) The relationship between borderline personality disorder and bipolar disorder. *Dialogues in Clinical Neuroscience* 15(2): 155-169.