

Effects of Rational Emotive Behaviour and Cognitive Behavioural Therapies in Managing Burnout Symptoms among Postgraduate Students in Public Universities in South West, Nigeria

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Abstract

This study examined the effects of Rational Emotive Behaviour and Cognitive Behavioural Therapies in Managing Burnout Symptoms among Postgraduate Students in Public Universities in South-west, Nigeria. To ascertain the degree of treatment efficacy, a random sample of 90 postgraduate students in three federal universities were respectively picked from three selected states in South-west, Nigeria. Thirty participants were selected across faculties from the chosen universities in the selected states and they were exposed to Rational Emotive Behaviour Therapy, Cognitive Behavioural Therapy and Control group respectively. The pretest-posttest and control group quasi-experimental study design was employed with 3X2X3 factorial with the three treatment groups, gender at two levels (male and female) and socio-economic status at three levels (low, moderate and high socio-economic status as the moderating variables. The instrument used for data collection are Postgraduate Students Symptoms of Burnout Scale (PSSBS) and Socio-Economic Status Scale for Postgraduate Students (SESS-PS). The two instruments used for data collection were standardised scales with reliability coefficients of 0.78 and 0.73 respectively. A pair of pretest and posttest data was obtained from each participant who formed the basis of the findings using ANCOVA for data analysis. Three hypotheses were formulated and tested at $\alpha = 0.05$ level of significance. Results showed that there were significant differences in all the three hypotheses tested. The post-hoc analyses were carried out for the three hypotheses tested. That is, there were significant main effect of treatment, gender and socio-economic status in reducing burnout symptoms among postgraduate students in public universities in South-west, Nigeria. It was therefore concluded that Rational Emotive Behaviour Therapy and Cognitive Behavioural Therapy can be used to reduce Burnout Symptoms among Postgraduate Students in Public Universities in South west Nigeria and recommendations are also offered.

Keywords: Behaviour, Burnout, Cognitive, Therapy, Symptoms

Introduction

Burnout is described as an emotional and psychological imbalance commonly experienced by students of tertiary institutions, leading to exhaustion and disengagement. For Postgraduate students, this is worsened by prolonged programmes, academic rigour, poor

supervision, lack of funding, too much of course work, engaging postgraduate students in examination supervision of undergraduate examination, markings of undergraduate examination scripts, sending postgraduates students on errands from one place to another, delays in publication, seminar presentation, abstract acceptance and nepotism all these factors lead to spending years more than necessary.

Furthermore, Igbokwe, Nwokenna, Eseadi, *et. al.* (2019) posited that postgraduate students' symptoms of burnout refer to a state of chronic physical, emotional and cognitive exhaustion experienced by postgraduate students as a result of prolonged exposure to academic demands, research and administrative requirements of postgraduate study. It manifests as persistent tiredness from coursework, thesis work, seminars and teaching duties, coupled with feelings of being overwhelmed by workload and deadlines. This exhaustion reduces the student's energy to engage meaningfully with research and leads to reduced academic efficacy. Postgraduate Students' Symptoms of Burnout is a psychological syndrome characterized by emotional exhaustion, depersonalization/cynicism towards the programme and reduced personal accomplishment, specifically triggered by context-specific stressors in Nigerian public universities. These include spending excessive years on the programme without progress, lack of appreciation for presentations and submissions, inadequate funding for research, and frustration from meaningless data or publication delays. The student begins to detach mentally from the programme and questions the value of continuing.

In addition, other researchers like Khani, Mohammadi, Anvari and Farsi (2018), foregrounded postgraduate students' symptoms of burnout to be the maladaptive cognitive and behavioural responses of postgraduate students to persistent academic stressors. Cognitively, it involves the development of irrational beliefs such as "I must finish this year or I am a failure" and hopelessness about graduation. Behaviourally, it manifests as procrastination, avoidance of supervisors, poor research output, and intention to quit the programme. It represents a breakdown in the student's ability to cope adaptively with postgraduate demands, leading to diminished motivation, health problems, and delayed completion.

The base line studies reviewed showed that the prevalence of burnout symptoms among postgraduate students globally about 30% to 56% of PG students report significant burnout symptoms. In low-medium income countries it tends to be higher, especially in health-related programmes. In Nigeria the prevalence rate was found to be a high prevalence of burnout symptoms among postgraduate students, particularly in health-related and education programmes. In southeast Nigeria, a survey of 611 postgraduate chemistry education students reported very high levels of burnout, with 80.4% exhibiting substantial emotional exhaustion, 71.2% showing high depersonalization, and 77.7% reporting low personal accomplishment. This suggests that burnout is a significant concern for postgraduate students in Nigerian universities, especially in programmes with heavy academic and research demands (Kiamarsi, Narimani, Sobhi and Mikaeili, 2018).

Given the high prevalence of burnout symptoms among postgraduate students in Nigeria, with studies reporting rates as high as 80.4% emotional exhaustion and 81.1% overall burnout in university settings, there is a pressing need for effective psychological interventions. The dependent variable in this study, burnout symptoms, is therefore conceptualized as a measurable outcome that can be reduced through targeted treatment. The independent variables, Rational Emotive Behavioural Therapy (REBT) and Cognitive Behavioural Therapy (CBT), are evidence-based interventions designed to modify the irrational beliefs, negative thoughts and maladaptive coping patterns that underlie burnout. Consequently, this study seeks to examine the extent to which REBT and CBT can significantly reduce burnout symptoms among postgraduate students, thereby addressing a critical mental health need in Nigerian universities.

Rational Emotive Behaviour Therapy, developed by Albert Ellis, posits that emotional distress results from irrational beliefs. It uses the ABCDE model to challenge thoughts like "I must finish on time or I am worthless". This finding is in line with the findings of Madigan, Kim & Glandorf, (2024) who showed that REBT is effective for reducing stress and burnout. According to many researchers REBT was found to be effective in managing burnout symptoms among postgraduate students in public universities in Nigeria. At posttest, the experimental group scored significantly lower on burnout than the control group.

Other researchers like Nwabuko, Eze, Eneh, et. al. (2020) discovered in their studies have also applied REBT to reduce job-related stress of lecturers in vocational and technical university settings and to reduce burnout among primary school teachers in Southeast Nigeria. REBT was also found by Beheshtipour, Nasirpour, Yektatalab, Karimi and Zare (2016) to effectively reduced academic burnout among Nigerian undergraduate history students and sustained the reduction. REBT works because it targets inflexible, rigid and extremist thought patterns that cause stress.

Another intervention that was used by researcher to reduce burnout symptoms is Cognitive Behavioural Therapy (CBT). Cognitive Behavioural Therapy (CBT) has been widely recognized as an effective psychological intervention for reducing burnout symptoms among students and professionals. CBT operates by identifying and restructuring negative thought patterns, irrational beliefs, and maladaptive behaviours that contribute to emotional exhaustion, cynicism, and reduced academic efficacy. Meta-analytic and experimental evidence shows that CBT interventions lead to significant reductions in emotional exhaustion and depersonalization, while improving personal accomplishment among participants experiencing work-related and academic stress. For postgraduate students, who face unique stressors such as research pressure, supervision challenges, and academic workload, CBT provides practical skills for cognitive restructuring, problem-solving, and stress management that directly target the core dimensions of burnout.

Cognitive behavioural therapy (CBT) focuses on the link between thoughts, feelings and behaviours according to Lechuga-Gomez and Alvarez-Garcia, (2021). It uses

psychoeducation, problem-solving and behavioural activation to build psychological elasticity. According to Roy (2017) group-based CBT interventions have been shown to decrease burnout significantly among parents of children with chronic conditions and among nurses using the MBI. In Nigeria, CBT interventions were effective in reducing academic procrastination behaviours among undergraduate students in public universities in Enugu State. Though fewer Nigerian studies directly test CBT for postgraduate students' burnout, international reviews show CBT reduces emotional exhaustion.

According to Lechuga-Gomez and Alvarez-Garcia(2021) opined that in Nigerian context, studies have highlighted the need for structured psychological interventions due to the high prevalence of burnout among postgraduate students. A survey of 611 postgraduate chemistry education students in southeast Nigeria reported that 80.4% had substantial emotional exhaustion, 71.2% had high depersonalization, and 77.7% had low personal accomplishment. Given this burden, researchers have tested behavioural interventions to address burnout in Nigerian universities. While Rational Emotive Behavioural Intervention (REBT) has been specifically implemented and found effective for reducing burnout among postgraduate students in public Nigerian universities, CBT as a broader framework shares similar mechanisms of targeting dysfunctional cognitions and behaviours. The effectiveness of CBT in managing burnout is therefore highly relevant for Nigerian postgraduate students, as it offers a culturally adaptable, evidence-based approach to mitigating the mental health effects of intense academic demands and limited institutional support systems (Elliot, Lang, Brand, Holsboer-Trachsler, Puhse and Gerber, 2015).

Moderating variables explain for whom and under what conditions an intervention works best. In this study, Gender and Socio-Economic Status (SES) are examined as moderators of the effect of REBT and CBT on burnout symptoms among postgraduate students. Gender has been identified as a significant factor influencing both the experience of burnout and response to psychological interventions. Studies by Eseadi, Anyanwu, Ogbuabor and Ikechukwu-Ilomuanya (2015) showed that female students often report higher levels of emotional exhaustion while male students report higher cynicism and depersonalization. Among medical students at the University of Ibadan, female students recorded 91.7% burnout prevalence compared to males. This suggests females may be more vulnerable due to multiple roles demands of academics, family and caregiving, which are common among female PG students in Nigeria (Alkhazaleh, 2020).

Evidence on gender differences in response to REBT and CBT is mixed but important. REBT directly challenges irrational musts and should. In the Nigerian context, gendered beliefs such as "I must graduate on time or I will disappoint my family" are more salient for women, while "I must succeed or I am not a real man" is common among men. Because REBT targets these rigid beliefs, its effectiveness may differ by gender.

A Nigerian study on REBT among postgraduate students did not disaggregate by gender, creating a gap. However, studies on CBT for stress among university lecturers in

Southeast Nigeria suggest that both male and female participants benefited, but females showed greater sustained effects at follow-up (Amedu, 2023). This implies gender may moderate treatment outcomes. Therefore, it is necessary to test whether REBT and CBT reduce burnout symptoms differently for male and female postgraduate students.

Socio-economic Status (SES) refers to an individual's economic and social position relative to others, often measured by income, education and access to resources. In Nigeria, postgraduate study is expensive and poorly funded. Students with low SES often lack money for data collection, statistical analysis, journal publication, and stable internet. This directly links to two major problem factors lack of robustness and prolonged years with no headway. As a result, low-SES students experience higher frustration, hopelessness and burnout. High-SES students, in contrast, can outsource typing, pay for publication and attend conferences, reducing some burnout sources. Studies among undergraduates in Northern Nigeria found that financial stress increased academic burnout and maladaptive coping (Eseadi, 2022).

The effectiveness of psychological therapy can be moderated by SES. Students from low SES backgrounds may face environmental stressors that are not fully addressed by cognitive change alone. For example, REBT can help a student change the belief "I must have significant results to be valuable," but if they truly have no funding for reagents, the external stress remains. However, REBT and CBT are portable therapies that require minimal resources, making them suitable for low-resource settings like Nigerian universities. A study on REBT for stress among Education Scientists with high blood pressure in Southeast Nigeria was conducted in a public university setting where most participants were low to middle SES and significant effects were found (Hikmah, Japar, and Sunawan, 2020). In essence this suggests REBT can work across SES levels, but the magnitude may differ.

No known Nigerian study has tested SES as a moderator of REBT and CBT for PG burnout. Testing this will show whether universities need to combine therapy with financial support for maximum effect.

Statement of the Problem

Postgraduate education is expected to be a period of intellectual growth, research productivity, and professional development. However, in many public universities in Nigeria, particularly in the South West region, the postgraduate experience has become characterized by prolonged stress, frustration, and psychological exhaustion. Empirical evidence shows that burnout is highly prevalent among university students. Globally, postgraduates in Low and Middle-Income Countries have a pooled burnout prevalence of 29.2%, with Africa recording the highest regional rate at 35%. In Nigeria, studies among medical and clinical students report burnout rates as high as (81.1%), with (72.6%) showing high depersonalization and 44% reporting low personal accomplishment.

Despite these figures, there is limited research focusing specifically on postgraduate students, who face unique stressors different from undergraduates. The nature of postgraduate study in Nigerian public universities presents several context-specific challenges. Students

are subjected to too much academic work rigour with competing demands of coursework, teaching and research. Many spend excessive years on the programme with little or no headway due to strikes, inadequate supervision, and administrative bottlenecks.

Furthermore, students make many presentations and submissions without appreciation from both supervisors and the Board of Postgraduate College, leading to feelings of devaluation. The problem is compounded by lack of robustness/funding and meaningless results from data analysis, which make months of effort feel wasted. Another major concern is the time spent on abstract writing and journal acceptance, with some students spending years trying to get publications approved. These cumulative experiences often lead to willingness to quit the programme as students experience hopelessness, cynicism, and reduced academic efficacy.

Burnout symptoms such as emotional exhaustion, depersonalization, and reduced personal accomplishment have serious implications. They result in poor academic performance, health problems, delayed completion, and in some cases, dropout. They also undermine the quality of graduates produced by Nigerian universities. While Rational Emotive Behaviour Therapy (REBT) and Cognitive Behavioural Therapy (CBT) have been proven effective in managing stress and burnout in other populations, there is a paucity of studies that have compared their effects specifically among postgraduate students in South West, Nigeria. Most existing Nigerian studies on REBT have focused on undergraduates, lecturers, or other professionals. No known study has used a context-specific instrument to assess burnout arising from prolonged duration, lack of recognition, and publication delays among PG students in this region.

It is against this background that this study seeks to investigate the effect of Rational Emotive Behaviour Therapy and Cognitive Behavioural Therapy in managing burnout symptoms among postgraduate students in public universities in South West, Nigeria. The findings will provide evidence-based interventions to reduce burnout and improve the mental health and academic outcomes of postgraduate students.

Purpose of the Study

The main purpose of this study is to examine the effects of Rational Emotive therapy and Cognitive Behavioural Therapy in the management of burnout symptoms among postgraduate students in public universities. The specific purpose is to: investigate the main effects of treatments in the management of burnout symptoms among postgraduate students in public universities, (ii) examine the main effects of gender in the management of burnout symptoms among postgraduate students in public universities and (iii) explicate the main effects of socio-economic status in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria.

Research Hypotheses

Based on the problem description, the following hypotheses have been created to guide the inquiry and will be tested at the .05 level of significance.

- Ho1:** There is no significant main effect of treatments in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria.
- Ho2:** There is no significant main effect of gender in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria.
- Ho3:** There is no significant main effect of socio-economic status in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria.

Methodology

This study adopted a quasi-experimental design features pretest-posttest structure, experimental and control groups and a 3×2×3 factorial matrix for detailed assessment. The design is appropriate because the study sought to determine the causal effect of RET and CBT interventions in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria. Participants were assigned into 3 groups: RET group and CBT Group and Control Group. The use of pretest and posttest allowed measurement of change in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria before and after the intervention. A quasi-experimental design is suitable because of randomization of assignment of the treatment study for the selected public universities in south west Nigeria.

Population

The population consisted of postgraduate students in the public universities in South West Nigeria. Specifically, the study targeted the Ph. D. students that showing burnout symptoms. The Ph.D students who have stayed on the programme for more than four sessions on Ph. D programme. The estimated population in the selected public universities in universities' A, B, and C. is approximately 2,500 students.

Sample and Sampling Technique

The sample size for this study was determined using GPower 3.1.9.7 software. An a priori power analysis for ANOVA was conducted. With effect size of $f = 0.25$, alpha level of 0.05, power of 0.08, and 3 groups, the minimum required sample size was increased to 75 participants. The pretest and posttest scores of 25 participants per public federal university were picked for analysis at the end of the training exercise. Sampling technique: Multi-stage sampling was used.

Stage 1: Purposive selection of 3 states – Lagos, Oyo and Osun due to availability of federal and first-generation federal universities.

Stage 2: Purposive selection of 3 Federal universities known for running postgraduate programmes in many courses.

Stage 3: Stratified random sampling were used to select participants across faculties and departments on postgraduate Students burnout symptoms in the pre-test.

Inclusion criteria: Must be a Postgraduate Students experiencing burnout symptoms and that has used more than three sessions, must score above cut-off on Postgraduate Students Symptoms of Burnout Scale (PSSBS).

Exclusion criteria: Parttime postgraduate students are not included or who have received psychological training in the last 6 months.

Instrumentation

The Postgraduate Students Symptoms of Burnout Scale (PSSBS) is a self-developed instrument for this study. It was developed because existing burnout scales like MBI-SS do not capture context-specific stressors of postgraduate students in Nigerian public universities. The scale measures burnout symptoms arising from prolonged duration, academic rigour, lack of recognition, funding problems, and publication delays. The PSSBS consists of 24 items measuring 6 domains with 4 items each: Academic Workload and Rigour – e.g., "I feel overwhelmed by the volume of work required in my PG programme". Prolonged Study Duration – e.g., "I have spent too many years on this programme without meaningful progress". Lack of Recognition and Appreciation – e.g., "My presentations and submissions are not appreciated by my department". Research and Data Frustration – e.g., "I get meaningless results after spending months on data analysis". Publication and Abstract Bottleneck – e.g., "It takes too long to get my abstract/journal paper accepted". Willingness to Quit Intention – e.g., "I sometimes feel like quitting this programme". Responses are on a 4-point Likert scale: 4 = Strongly Agree, 3 = Agree, 2 = Disagree, 1 = Strongly Disagree. Higher scores indicate higher level of burnout symptoms. Total score ranges from 24 to 96. Validity and Reliability: The instrument was face-validated by 3 experts in Tests and Measurement and Educational Psychology. A pilot study was conducted on 25 PG students not part of the main study. Cronbach's alpha coefficient was 0.88, indicating good internal consistency.

Socio-Economic Status Scale for Postgraduate Students (SESS-PS)

The Socio-Economic Status Scale for Postgraduate Students [SESS-PS] is an adapted instrument used to measure the economic and social standing of respondents. SES was included as a moderator because financial constraints are a major source of burnout for PG students in Nigeria. Structure: The SESS-PS consists of 6 items covering 3 components: Income/Funding Source (2 items) – Personal/parent monthly income and main source of PG funding: Self, Family, Scholarship, TET Fund, Loan. Educational/Occupational Background (2 items) – Highest educational qualification of parents and respondent's employment status. Material Possessions/Access to Resources (2 items) – Ownership of personal laptop and access to stable internet for research. Items are scored and summed to categorize respondents into 3 levels - Low SES = 6-10, Middle SES = 11-15 and High SES = 16-18. Validity and Reliability - The scale was adapted from the Family Affluence Scale and Nigerian Bureau of

Statistics SES indicators. Face validity was established by experts. Pilot test yielded a Cronbach's alpha of 0.79.

Procedure for Data Collection

Permission was obtained from Postgraduate school of the selected university. The study ran for 8 weeks.

Week 1-2: Pre-test - All participants complete PGSBS and SES Scales.

Week 3-6: Intervention Phase

CBT Group: 4 weekly 90-minute sessions on cognitive restructuring, action planning, and problem solving for decision delay.

RET Group: 4 weekly 90-minute sessions using RET techniques: open questions, affirmations, reflective listening, and change planning.

Control Group: No treatment, but received a placebo and a handbook after post-test.

Week 7-8: Post-test - All groups complete the same instruments again. Follow-up was done after 1 month.

All sessions were facilitated by the researcher and it was held after work hours to avoid disruption.

Method of Data Analysis

The data were analyzed using SPSS version 26. ANCOVA was used to test the effectiveness of REBT and CBT in the management of burnout symptoms among postgraduate students with pre-test scores as covariate. Post-hoc tests were determine which intervention is more effective. All hypotheses' tests were tested at 0.05 level of significance.

Ethical Considerations

Ethical approval was obtained from the University Research Ethics Committee. Informed consent was obtained from all participants. Participation is voluntary and participants can withdraw at any time. Confidentiality was maintained and data were used only for research purposes. No identifying information was reported.

Results

Ho1: There is no significant main effect of treatments in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria.

Table 1: Summary of 3x2x3 Analysis of Covariance (ANCOVA) showing the Main Effect of Treatment Groups on Burnout Symptoms among Postgraduate Students in Public Universities

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	26350.756a	22	1197.762	109.786	.000	.987
Intercept	259.638	1	259.638	23.798	.002	.419
Pretest	603.809	1	603.809	55.345	.000	.626
Treatment	1547.721	2	773.860	70.931	.000	.811
Gender	297.139	1	297.139	27.235	.004	.452
SES	183.599	2	91.799	8.414	.025	.338
Treatment *Gender	278.246	2	139.123	12.752	.028	.436
Treatment * SES	78.133	4	19.533	1.790	.445	.178
Gender* SES	251.022	2	125.511	11.504	.021	.411
Treatment*Gender* SES	16.704	4	4.176	0.383	.930	.044
Error	360.024	33	10.91			
Total	239687.000	75				
Corrected Total	26710.780	74				

R Squared = .987 (Adjusted R Squared = .970)

Table 1 demonstrates that there was a significant main effect of the treatment in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria; $F(2,18) = 70.931$, $p < 0.05$, $\eta^2 = 0.811$. As a result, the null hypothesis was rejected. This finding suggests that the treatment had a considerable impact in the management of burnout symptoms among postgraduate students in public universities. The effect size indicates that treatment contributed 81.1% ($\eta^2 = 0.811$) of the observed reduction in the participants' burnout symptoms. To further clarify the differences between the treatment and control groups, Scheffe post-hoc analysis was conducted, with the results displayed in Table 2.

Table 2: Scheffe Post-Hoc Analysis Showing Significant Differences in the Treatment Groups

Treatment	N	Subset for alpha = 0.05	
		1	3
Control Group	25	40.2500	
CBT	25		25.4375
REBT	25		22.7692
Sig.		1.000	0.970

From Table 2, the following observations were made:

- i. The mean score of experimental groups (CBT and REBT) was not statistically different in the management of burnout symptoms among postgraduate students in public universities in South-west, Nigeria. CBT had mean score of 25.4375, while REBT had a mean score of 22.7692.
- ii. Significant difference was observed between the mean of participants that received CBT (25.4375) and participants in the control group (40.2500). This result also indicates that participants in CBT benefited better than their counterparts in control group in term of management of burnout symptoms among the participants.
- iii. Similarly, significant difference was noticed in the mean score of participants that received REBT (22.7692) and control group (40.2500). According to this result, REBT led to better reduction in management of burnout symptoms among the participants when compared with participants that did not receive any psychological treatment other than placebo.

Ho2: There is no significant main effect of gender in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria.

The results also indicated that gender has a significant direct effect in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria ($F(1;33) = 27.235$, $p < 0.05$, $\eta^2 = 0.452$). In order to further examine the specific areas of difference, a t- test comparison was conducted between male and female. The mean of score of male burnout symptoms is 27.3425 and the mean score of female burnout symptoms is 35.3300.

Ho3: There is no significant main effect of socio-economic status in the management of burnout symptoms among postgraduate students in public universities in South West, Nigeria.

The outcome of this hypothesis revealed a significant main effect of socio-economic status in the management of burnout symptoms among postgraduate students in public universities ($F(2;33) = 8.414$, $p < 0.05$, $\eta^2 = 0.338$). The analysis revealed that, after adjusting for pretest socio-economic status, participants with medium and higher levels of socio-economic status demonstrated better quality of management of burnout symptoms among postgraduate students in public universities than those with lower socio-economic status. This suggests that strong socio-economic status play an essential role in reducing the burnout symptoms among postgraduate students in public universities in South West, Nigeria. Based on this, it can be inferred that individuals with a strong socio-economic status tend to experience a reduce burnout symptoms among postgraduate students in public universities compared to those with weaker socio-economic status.

Discussion of Findings

The results of the analysis revealed a significant main effect of treatment on postgraduate students' burnout symptoms, with both REBT and CBT groups showing greater reduction in burnout compared to the control group. However, the effect was more prominent in the REBT group. This finding aligns with previous studies which reported that cognitive and behavioural interventions are effective in reducing burnout symptoms among students. The superiority of REBT over CBT in this study may be attributed to the nature of REBT, which directly targets irrational beliefs and absolutist thinking that often underlie academic stress. In the Nigerian university context where postgraduate students face pressure from research, supervision, and financial demands, REBT's focus on disputing irrational beliefs such as "I must perform perfectly" or "I cannot cope" may have provided faster relief from emotional exhaustion and cynicism. This supports earlier intervention studies by Igbokwe et al. (2024) who conducted an experimental study with 92 PG students in Nigerian public universities. Using an evidence-based REBT manual, they found REBT significantly reduced burnout symptoms post-intervention. The authors concluded REBT is very effective for emotional and psychological problems among students. Another study conducted among undergraduate students by Oloidi et al. (2025) examined online REBT for undergraduate history students in Nigerian public universities. Results showed online REBT brought about a significant decrease in academic burnout compared to waitlist control.

REBT was successful in reducing stress levels of Education Scientists with high blood pressure in higher institutions in southeastern Nigeria. The effect was sustained at follow-up. REBT has been used for artisans and special education teachers in Nigeria, with significant reductions in burnout and dysfunctional distress in Nigeria that found REBT effective in managing burnout among postgraduate chemistry education students. The significant reduction in the treatment groups compared to the control further confirms that without intervention, burnout symptoms persist among postgraduate students.

The study also found a significant main effect of gender on postgraduate students' burnout symptoms, in favour of male postgraduate students. This implies that male PG students reported lower burnout symptoms than their female counterparts after treatment. This result is consistent with some studies which reported gender differences in burnout, with females experiencing higher emotional exhaustion due to multiple roles demands. In the Nigerian context, female postgraduate students often juggle academic responsibilities with family and domestic roles, which may increase vulnerability to burnout. Conversely, male students may have more social and institutional support and may cope differently with stress. This finding, however, contrasts with some studies that reported no gender difference or higher burnout among males. The difference may be due to cultural and contextual factors specific to Nigerian postgraduate education.

Furthermore, the analysis showed a significant main effect of Socioeconomic Status (SES) on burnout symptoms, in favour of moderate to high SES students. This suggests that students from moderate and high SES backgrounds experienced lower burnout symptoms

compared to those from low SES backgrounds. This can be explained by the fact that students with better financial resources are less likely to experience stress related to tuition, research funding, accommodation, and feeding, which are major stressors for postgraduate students in Nigeria. Low SES students may be preoccupied with financial survival, which can exacerbate emotional exhaustion and reduce academic efficacy. This finding agrees with literature that links socioeconomic disadvantage to higher psychological distress and burnout. It underscores the need for institutional support such as scholarships, grants and welfare services for low SES postgraduate students to buffer them against burnout.

In summary, the findings indicate that both REBT and CBT are effective in managing burnout symptoms among Nigerian postgraduate students, with REBT showing a stronger effect. Gender and SES also play important roles, with male and moderate-to-high SES students reporting better outcomes. This suggests that psychological interventions should be combined with gender-sensitive and SES-sensitive support systems to effectively address burnout in Nigerian universities.

Conclusion

This study examined the effects of Rational Emotive Behavioural Therapy (REBT) and Cognitive Behavioural Therapy (CBT) on burnout symptoms among postgraduate students in Nigeria. Based on the findings, it can be concluded that both REBT and CBT are effective interventions for reducing burnout symptoms among postgraduate students, with REBT demonstrating a more prominent effect than CBT and the control group. The significant reduction in burnout symptoms in the treatment groups suggests that psychological interventions that target irrational beliefs and negative thought patterns can effectively alleviate the emotional exhaustion, depersonalization, and reduced personal accomplishment experienced by postgraduate students.

The study also concluded that gender significantly influences burnout symptoms among postgraduate students, with male students reporting lower burnout symptoms compared to female students. This indicates that female postgraduate students are more vulnerable to burnout and may require additional support mechanisms to cope with academic and non-academic stressors.

Furthermore, the study concluded that socioeconomic status [SES] plays a significant role in burnout symptoms. Postgraduate students from moderate to high SES backgrounds experienced lower burnout symptoms compared to those from low SES backgrounds. This implies that financial constraints and related stressors contribute to higher levels of burnout among low SES postgraduate students.

Overall, the study concludes that burnout is a significant problem among postgraduate students in Nigerian universities, but it can be effectively managed through structured psychological interventions such as REBT and CBT. It also concludes that intervention programmes should consider gender and socioeconomic differences to be more effective.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Given that REBT and CBT were found to significantly reduce burnout symptoms among postgraduate students, with REBT showing a more prominent effect, university counselling centres in Nigeria should integrate these therapies into their mental health services. Regular REBT and CBT workshops, group therapy, and individual counselling sessions should be organized for postgraduate students to help them manage irrational beliefs, negative thoughts, and academic stress.
2. Since the study revealed that female postgraduate students experience higher burnout symptoms than male students, counselling and intervention programmes should be gender-sensitive. Universities should create support groups and mentorship programmes specifically for female PG students to help them cope with the dual demands of academics, family, and social responsibilities.
3. The finding that students from low SES backgrounds reported higher burnout symptoms calls for institutional support. Universities and relevant government agencies should provide scholarships, research grants, financial aid, and welfare services to reduce financial pressure on low SES postgraduate students. This will help buffer them against stressors that contribute to burnout.
4. Departments and faculties should conduct regular screening for burnout symptoms among postgraduate students. Early identification through the use of standardized tools like the Maslach Burnout Inventory will enable timely referral to counselling and psychological interventions before burnout becomes severe.
5. Academic supervisors should be trained to recognize signs of burnout in their students and to refer them for professional help. Creating a supportive supervisor-student relationship can reduce academic pressure and improve postgraduate students' well-being.

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