

Effect of Rational-Emotive Burnout Management Programme on Occupational Burnout among Health and Physical Education College Teachers in Nigeria

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ABSTRACT

Occupational burnout is an adverse reaction to prolonged stress in workplace. Teachers are among the most vulnerable groups to occupational burnouts particularly in school system. This study investigated the effect of rational-emotive burnout management intervention -REBMP on occupational burnout among health and physical education college teachers -HPECTs in Nigeria. An experimental research design involving a purposive sample of 248 participants who were assigned to either intervention (n=124) or control (n=124) groups was adopted. The study was based on pre-posttest measures from August and December, 2019. The REBMP treatment manual was delivered to participants in intervention group. A standardized teacher burnout inventory scale -TBIS with 0.85 reliability index was used for data collection while IBM SPSS version 22 was used for data analysis. The result showed that REBMP has significant effect on occupational burnouts of HPECTs. The participants in intervention group had lower score (21.78±1.86) in the posttest measure when compared to pretest scores (38.43±0.80). Also, while no significant difference existed between participants in intervention (38.43±0.80) and control groups (32.30±0.09) on teacher burnout inventory scale -TBIS pretest (P=0.108>0.05), significant difference was observed on participants in intervention (21.78±1.86) and control groups (33.21±1.07) on TBIS posttest scores (P=0.019<0.05). In conclusion, psychological and health promotion programmes are effective tools to managing occupational burnouts in workplaces and thus, should be adopted particularly in school system. The adoption of the programmes would enhance productivity, job performances and satisfactions among employees.

Keywords: burnout, REBMP, effect, teachers, education

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I. INTRODUCTION

Occupational burnout is an adverse reaction to prolonged stress in workplace. In school settings, teachers are among the most vulnerable groups to occupational burnouts which seem inevitable due to certain prevailing psychological and emotional distress associated with teaching profession [1, 2]. Burnout experienced in schools usually emanates from excess workloads, unnecessary delays in payment of salaries, low prospects for professional development, poorly funded researches, and unhealthy school environment [2, 3]. Prolonged burnout is a potential threat that is highly detrimental to health and wellbeing of individuals [4]. It can also decrease teacher's efficacy and academic activities and may result to maltreatment of students as well as the use of abusive disciplinary approaches [5]. There is evidence that teachers experiencing prolonged burnout are susceptible to depression, substance abuse, irritability, insomnia, low appetite, job ineffectiveness, exhaustion, anger, boredom, fatigue, frustration, and alcoholism [4]. Evidently, occupational burnouts are observable and the resultant effects are felt on teaching and academic performances of the students. This implies that teachers' welfare and satisfactions are paramount in school system since they are the key motivations to job performance and productivity and thus, the need to manage burnout through reliable intervention programme.

From the theoretical perspectives of rational-emotive approach, vulnerability to occupational burnout is triggered by irrational beliefs which plays significant role in burnout prediction and levels [6, 7]. According to Maslach, Schaufeli and Leiter [8], rational-emotive theory is one of the best coping mechanisms to high burnout level. Researchers availed other coping mechanisms to include: Job Demands-Resources Model [9, 10] and the Conservation of Resources Theory [11]. Hobfoll affirms that while job demands-resources model predicts burnout as a result of demands overwhelming the resources of the individual to address the demands, the conservation of resources model (COR) assumes that people are motivated to gain resources and avoid losing them with more resources being negatively related to burnout [11]. Hobfoll further criticized appraisal models, not that appraisal doesn't occur, but that burnout is more greatly determined by more automatic and socially constrained forces that the appraisal theories typically permit.

Intervention programmes are vital tools that are essential in managing occupational burnout and irrational beliefs among workers [12, 13]. The literature reviewed showed lapses and inadequacy of effect studies in managing occupational burnouts among Nigerian teachers in general and health and physical education college teachers - HPECTs in particular. The HPECTs are deemed most suitable for this study due to the practical demonstrations involved in teaching the subject that requires high level of psychological and emotional soundness from the teachers. The REBMP is a well-developed and validated program structurally designed to manage occupational burnout in workplaces. Previously, similar intervention programme recorded a significant effect in managing burnout and emotional distress [14]. Therefore, this study investigated the effect of REBMP on occupational burnout among HPECTs in Nigeria and further verified the significant differences within study groups and demographic variables.

II. MATERIALS AND METHODS

Ethics and research design

The approval for this study was granted by Research and Ethics Committee of University of Nigeria, Nsukka. The approval was in line with the ethic principles and declarations in conducting studies on human individuals [15, 16]. The study was based on experimental research design involving pre- posttest measures.

Participants and recruitment procedures

A total of 248 HECTs were purposively recruited from public secondary schools in Nigeria between August and December 2019. The choice of public school was to eliminate possible bias regarding school standard. Prior to the study, the researchers created awareness and disseminated information about the research to all the HPECTs and further emphasized on the eligibility of participants. The eligibility criteria include: 1) previous experience of burnout in school, 2) eager to participate in the program from the start till end, and 3) willful completion of the informed consent form. Only those who met the above criteria participated in the study. The researchers randomly assigned 248 eligible participants to either intervention (N=124) or control groups (N=124) as suggested by previous researchers [13, 17, 18]. The REBMP manual was delivered to only the participants in the intervention group. The participants in the control group were exempted from the treatment in order to establish the effect of the REBMP on occupational burnout. The REBMP manual is very easy to understand and was compiled using simple English language. The treatment programme lasted for two hours duration in each group session, once per week. The programme lasted for twelve consecutive weeks without any serious obstruction or harm. As agreed by the parties, one of the classrooms served as the venue for the treatment programme. In order to control allocation bias, the researchers maintained independent administration of the pre-posttest measures at different time interval among the participants in both groups. The researchers further blinded all the data generated until the completion of the entire statistical analysis. This was done to control other possible risks.

Research instrument

The pre-posttest data was collected using teacher burnout inventory scale –TBIS with reliability coefficient of .85 indexes. The Shirom-Melamed Burnout Questionnaire was adopted which specifically measured teachers' burnout levels in school settings in the areas of physical fatigue, emotional exhaustion, and cognitive weariness [19]. The HPECTs responded to a 7-point Likert-type scale on the adapted items of TBIS. The researchers coded globally the scores on teachers' burnout. In the standardized TBIS, high burnout level was indicated by high scores while low scores depicted low burnout level. This was applied in this study to establish the effect of REBMP on occupational burnout of HPECTs.

Statistical analysis

The IBM SPSS version 22 was used for statistical data analysis [20]. All considerations and statistical assumptions were met. There was no record of missing data in the study. A repeated-measure of analysis of variance (ANOVA), t-test analysis, an adjusted R², partial eta squared (η^2_p), and confidence intervals of results were applied in establishing the effect size of REBMP. The HPECTs completed the pre-posttest measures. The results of this research were deemed statistically significant at $P \leq 0.05$.

III. RESULTS

Table 1: Demographic Profile of the Study Participants (N=248).

Parameter	Variables	Treatment group N(%)	Control group N(%)	Statistic	PV
Gender	Male	57 (46%)	72 (58%)	4.013	0.409
	Female	67 (54%)	52 (42%)		
YTE	Below 10 years	72 (58%)	57 (46%)	0.009	0.036
	10 years plus	52 (42%)	67 (54%)		
Location	Urban Area	52 (42%)	67 (54%)	2.010	0.209
	Rural Setting	72 (58%)	57 (46%)		
Age	Below 30 years	62 (50%)	57 (46%)	3.004	0.008
	30 years plus	62 (50%)	67 (54%)		

Keys: N=sample size, %=percentage, () = bracket sign, PV = probability value, YTE=years of teaching experience.

A total of 248 HPECTs participated in the study with 100 per cent compliance rate to the treatment intervention. Both male and female HPECTs were properly represented in each group. There were 57(46%) males and 67(54%) female HECTs in the intervention group; and 72(58%) males and 52(42%) females in the control group, with no statistically significant difference ($0.05 < 0.409$). The participants' YTE varied greatly and made significant impact in the study. For instance, a total of 72(58%) them had below 10 YTE and 52(42%) had worked for 10 years and above in the intervention group; and 57(46%) of them had below 10 years of teaching experience and 67(54%) had worked for 10 years and above in the control group, with obvious statistically significant difference ($0.05 > 0.036$). There were 52(42%) participants from urban area and 72(58%) of them from rural location in the intervention group; and 67(54%) participants from urban location and 57(46%) of them from rural area in the control group, with no existing statistically significant difference ($0.05 < 0.209$). Age was a significant variable in establishing the significant effect and it varied. For instance, a total of 62(50%) of them were below 30 years and 62(50%) were 30 years and above in the intervention group; and 57(46%) of them were below 30 years and 67(54%) of them were 30 years and above in the control group, with significant difference ($0.05 > 0.008$). This study did not record any harm or hazard during the treatment intervention session (see Table 1).

Table 2: Presenting Effect of REBMP on Occupational Burnout among HPECTs (N=248).

Tool	Measures	Groups	Mean Score	Standard Deviation	Probability Value
TBIS	Pretest	Intervention	38.43	0.80	0.108
		Control	32.30	0.09	
TBIS	Posttest	Intervention	21.78	1.86	0.019
		Control	33.21	1.07	

TBIS = teacher burnout inventory scale, *HPECTs* = health and physical education college teachers, *N* = sample size, *REBMP* = rational emotive burnout management programme

Table 2 presented the effect of REBMP on occupational burnout among HPECTs. The Table showed no statistically significant difference between the participants in intervention (38.43 ± 0.80) and control groups (32.30 ± 0.09) on TBIS pretest ($P=0.108 > 0.05$). However, statistically significant difference was observed between the participants in intervention (21.78 ± 1.86) and control groups (33.21 ± 1.07) on TBIS posttest scores ($P=0.019 < 0.05$). The Table further showed that the participants in intervention group scored lesser (21.78 ± 1.86) in the posttest TBIS measures when compared to pretest scores (38.43 ± 0.80), implying a positive effect of REBMP. Also, the posttest TBI score of participants in intervention group (21.78 ± 1.86) was lesser when compared with the posttest TBI score of those in the control group (33.21 ± 1.07). This change was also due to the treatment received. The significant effect size of REBMP in managing occupational burnout among HPECTs in Nigeria was shown (see Table 2).

IV. DISCUSSION

This intervention-based research was poised to investigate the effect of REBMP on occupational burnout among HPECTs. The finding of the study is clearly presented and it reveals the significant effect size of the treatment intervention (REBMP) in managing occupational burnout among HECTs. The pretest score of the participants in intervention group showed high burnout level while the post test measures of the same group recorded low burnout level as evidenced in the low score. The changes in the scores within groups and periods are attributable to the treatment intervention given. This result is quite encouraging and could serve as positive step towards addressing piles of prevailing occupational burnouts among workers in Nigeria and other countries of the world [2, 3]. In accordance with our findings, previous studies confirmed the significant effects of similar intervention programmes in reducing burnout levels [6, 21], managing psychological distress [22] and burnout symptoms [13]. Also, the efficacy of intervention programs in enhancing individual's wellbeing was reported by both clinical and nonclinical professionals [23, 24]. Further researchers reported affirmed that intervention program was significantly effective for experts working with teachers [25]. It is therefore becomes very important to align these collective findings in enhancing teachers' welfare and combat diverse forms of occupational burnouts as occurring in Nigerian school system. It is one of the expectations of the researchers that this remarkable action, would enhance the quality of teaching profession and service delivery, improve academic performance and job satisfactions, boost teachers' welfare, encourage high productivity and improve academic performances of the students.

This study has contributed to the wealth of literature and data relating to significant effects of intervention programs in managing occupational burnout in workplaces. High occupational burnout declines productivity levels and aggravates job dissatisfaction as well as triggers cases of depression, anxiety and distress [21, 22]. There are clear implications accruing from the present findings which will be beneficial to experts in guidance and counseling units, occupational health sector, emotional and behavioral medicine. These experts may adopt the findings in developing effective management intervention system to help clients (patients) develop control and successfully manage burnouts. It is expectation of previous researchers that the adoption of

reliable intervention program would avail the bond existing between one's belief and the demands of their occupation [26, 27]. The present study recorded statistically significant differences within groups and demographic variables.

The present study recorded some limitations. Firstly, the data collection primarily relied only on the use of standardized questionnaire (TBIS). The instrument did not give the participants to share personal experiences or views regarding burnouts. Thus, there is need for a future research of this kind that would allow for a wider application of multiple research methods for data collection and qualitative reports such as interview and focus group discussions. Secondly, the present study was limited to pre-posttest measures. Further research is needed to conduct a follow-up survey on the same study population. Finally, only HPECTs in public secondary schools were studied. There is need for future studies to explore all the HPECTs in public, missionary and private schools in Nigeria for proper documentation and generalization of findings.

V. CONCLUSION

The REBMP has significant effect on occupational burnout among HPECTs in Nigeria. Also, psychological and health promotion programmes are effective tools to managing occupational burnouts in workplaces and thus, should be adopted particularly in school system. The adoption of the programmes would enhance productivity, job performances and satisfactions among employees.

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