

EFFECT OF RATIONAL-EMOTIVE DISTRESS MANAGEMENT PROGRAM ON OCCUPATIONAL-INDUCED EMOTIONAL DISTRESS AMONG TEACHERS OF SPECIAL NEED CHILDREN IN NIGERIA

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ABSTRACT

Globally, workers are vulnerable to occupational-induced emotional distress in workplaces. This study investigated the effect of rational-emotive distress management program (REDMP) on occupational-induced emotional distress (OIED) among teachers of special need children (TSNC) in Nigeria. An experimental research design was adopted. A purposive sampling was used in recruiting 236 TSNC from special need nursery and primary schools between July and October, 2019. The assignment of participants was done on both experimental (n=118) and control (n=118) groups accordingly. The TSNC in experimental group received REDMP manual while both groups responded to the profile of emotional distress–PED (internal consistency=0.94). All results were computed using IBM SPSS version 22. Statistical significance was set at $p \geq 0.05$. The findings showed that TSNC in experimental group scored lower in the posttest (18.99 ± 0.071) and follow-up (17.05 ± 0.042) measures when compared to pre-treatment scores (27.85 ± 0.090) indicating reduced emotional distress. No significant difference existed between TSNC in the experimental (27.85 ± 0.090) and control groups (26.11 ± 1.018) on PEM pretest ($p=0.944 > 0.05$); and experimental (17.05 ± 0.042) and control groups (26.33 ± 0.008) on PEM follow-up, ($p=0.110 > 0.05$) while difference existed between

TSNC in experimental (18.99±0.071) and control groups (25.37±0.182) on PED posttest scores (p-0.008<0.05). Within variables, no significant difference was found on gender (p-0.610), age (p-0.914) and location (p-0.102) while differences existed on years of service delivery (p-0.041) and marital status (p-0.038). The REDMP has significant effect on OIED of TSNC. The adoption of reliable programs (such as REDMP) by professionals in managing emotional and psychological health problems is crucial in occupational environment.

Keywords: emotional distress, REDMP, effect, TSNC, OIED

INTRODUCTION

Occupational-induced emotional distress among workers is increasingly reported [1, 2]. The vulnerability to emotional distress is often aggravated by irrational beliefs and thoughts [3]. Certain indicators such as irrational beliefs, psychopathological conditions, and maladaptive behaviors are linked with emotional distress [4]. This invariably affects emotional stability, job satisfaction and productivity level. Teachers of special need children (TSNC) are prone to both dysfunctional (depression) and functional (sadness) emotional distress. The dysfunctional distress involving negative thoughts and maladaptive feelings usually precede functional distress as observed in depression involving sadness [5]. Both rational and irrational beliefs are indicators of emotional distress prediction resulting in mood disorders, high level of depression and anxiety [4, 6]. The role of intervention programs in disputing irrational beliefs and achieving adaptive beliefs are variously reported [5, 7, 8]. Such programs help individuals to manage emotional distress and irrational beliefs associated with their occupation [5]. Victims of emotional distress frequently report poor productivity level, illnesses, absenteeism, and increased healthcare expenses [9, 10]. An effective approach of alleviating experience of occupational-induced emotional distress (OIED) is the administration of psychosocial or mental health programs in workplaces including schools [11].

The rational emotive distress management program –REDMP is specifically validated to alleviate high level of emotional distress among teachers of special need children. The TSNC have the expertise and emotional support skills to provide the extra required teaching and care-giving services to children with developmental and functional disabilities (such as autism spectrum disorder, cerebral palsy, intellectual disability, hearing loss, vision impairment, learning disorder, and Down syndrome) [11]. Recent study described teaching as a stressful occupation [12]. These individuals experience high levels of emotional distress due to the prevailing sensory, communicative and intellectual impairments prominent among the children [13]. Studies adopting similar intervention reported its significant effect in reducing and managing emotional distress [14].

However, there are still limited studies focusing on OIED among special groups such as TSNC in Nigeria. Although, similar intervention studies abound [7, 15], yet none has focused on helping the TSNC in managing OIED. There are evidenced-based report that high level of emotional distress makes one more vulnerable to multiple psychological reactions such as burnout and chronic stress [8, 16, 17]. Teachers experiencing emotional distress often have difficulty controlling their emotional reactions [8]. Managing psychological reactions using

programs with rational emotive and cognitive-behavioral components are reported to be significantly effective [8, 15]. Teachers are flexible and thus, they can easily adjust their thinking patterns and beliefs. This study therefore, determined the significant effect of REDMP on OIED among TSNC and further tested the statistically significant differences with groups and intervals.

I. MATERIALS AND METHOD

Research design and recruitment procedures of participants

This study was based experimental research design. A good number of scholars had adopted the design in finding out the significant effect of interventions/programs in their studies and thus, it's consideration for use [15, 18-21]. A purposive sampling technique was adopted in recruiting 236 TSNC who participated in the program. The potential participants were gotten from special need nursery and primary schools in Nigeria between July and October 2019. Prior to the commencement of the investigation, a commendable public awareness was created by the researchers with official notification sent to the heads of administration of the various special need schools. The notification letter presented emphasis stressing the crucial need to conduct the study. This noble action by the researchers facilitated the successful enrolment of the eligible participants and also enhanced the elimination of possible sampling bias.

The prospective participants were exposed to certain eligibility criteria which must be met before full inclusion to participate in the program. These include: 1) must have experienced occupational-induced emotional distress in the school, 2) must be eager to actively participate in the program from the first day till the last day, and 3) must complete an informed consent form with ease. However, out of 1,166 teachers who were purposively sampled, only 236 of them survived the eligibility test and thus were used for the program. Exclusion to participate in the study was limited to those who could not survive the eligibility test. The investigators completed the randomized assignment of the 236 eligible participants to either experimental (N=118) or control groups (N=118). This was in line with the suggestions of renowned researchers in intervention studies [16, 19-22]. The intervention manual (REDMP) was implemented only to the participants in the experimental group while those in the control group responded only to the profile of emotional distress questionnaire. This was done by the researchers in order to affirm the significant effect of REDMP on occupational-induced emotional distress.

The content of the program and its implementation was done in English language. This is because English is the official language for communication and teaching in Nigerian schools. The program (REDMP) was successfully implemented for eight weeks (once per week). For each group session, two hours duration was allotted. The program was executed as planned without any significant physical, social or environmental hazard. As agreed with the participants and investigators, the school classrooms were used for the program implementation. At different intervals, the researchers maintained absolute independent administration of the pretest, posttest and follow-up measures on the participants in both groups (experimental and control). The quantitative data generated was completely blinded

from both groups (experimental and control) and periods (pretreatment, post-treatment and follow-up) until the completion of all the statistical analysis. The essence was to control all possible statistical bias. The follow-up measure was conducted after three months from the end of group program as suggested [18]. The participants received some token for participating in the program.

Research instrument

The profile of emotional distress (PED) with a high internal consistency (Cronbach's $\alpha=0.94$) was the only research instrument used for data collection [22]. The PED is a self-reported questionnaire and a reliable tool that permits researchers to code global score of emotional distress. This is possible because the PED assesses multiple dimensions of emotional distress. In order to provide responses to the items of PED, the participants responded in a 5-point Likert-type scale. As applied in PED, high mean percentage scores on items depict high level of emotional distress while the low scores signify low level of emotional distress [22].

Statistical analysis

All the statistical data analysis was completed using International Business Machine (IBM) SPSS version 22 [23]. The key statistical assumptions were met and there was no missing data after a thorough data cross-check. Analysis of variance (ANOVA) and t-test statistical tools were adopted in order to establish the effect size of the program (REDMP). In addition, partial eta squared (η^2), confidence intervals of results and adjusted R^2 were also recorded. All the participants completed the pretest and posttest measures. The results of this experimental study were considered statistically significant at $P \geq 0.05$.

Statement of ethics

This study was performed in line with the principles of the Declaration of Helsinki [24]. Approval was granted by the Ethics Committee of University of Nigeria, Nsukka (REC/HKHE/19/00151).

II. Results

Table 1: Socio-demographic characteristics of the participants (N=236).

Demographics	Variables	N	Experimental grp f(%)	Control grp f(%)	Stat.
Gender	Male	110	51(46%)	59(54%)	1.930 0.610
**	Female	126	67(53%)	59 (47%)	
Personal age	≤30 years	128	73(57%)	55 (43%)	0.883
0.914	**				
	≥30 years	108	45(42%)	63 (58%)	
Location	Urban Setting	122	68(56%)	54(44%)	1.009
0.102	**				
	Rural Area	114	50(42%)	64(58%)	
YSDE	≤10 years	104	51(49%)	53(51%)	3.097 0.041
*					
	≥10 years	132	67(51%)	65(49%)	
Marital Status	Married	127	62(49%)	65(51%)	0.172 0.038
*					
	Unmarried	109	56(51%)	53(49%)	

*Keys: Rmks = remarks, Stats. = statistics, N=sample size, * = significant difference, ≤ = less than or equal sign, %=percentage, f =frequency, ()=bracket sign, Sig=significance, ≥ = greater than or equals sign, YSDE=years of service-delivery experience, ** = no significant difference.*

The program (REDMP) recorded a 100% compliance rate by 236 participants. In the experimental group, there were 51(46%) males and 67(53%) females; and 59(54%) males and 59(47%) females in the control group, without existing significant difference (stat. = 1.930; P-value = 0.610>0.05). Also, there were 73(57%) participants below 30 years of age and 45(42%) of them who were above 30 years in the experimental group; and 55(43%) of them who were below 30 years and 63(58%) of them who were above 30 years in the control group, without observed significant difference (stat. = 0.883; P-value = 0.914>0.05). In the experimental group, there were 68(56%) participants from urban location and 50(42%) of them from the rural settings; and 54(44%) participants from urban location and 64(58%) of them from rural area in the control group, with no observed significant difference (stat. = 1.009; P-value = 0.102>0.05). According to years of service-delivery experience, there were 51(49%) of them below 10 years of service delivery and 67(51%) indicated 10 years and above in the experimental group; and 53(51%) of them were below 10 years and 65(49%) of them had 10 years and above in the control group, with observed significant difference (stat. = 3.097; P-value = 0.041<0.05). Based on marital status, a total of 62(49%) were married and 56(51%) unmarried in the experimental group; and 65(51%) of them were married and

53(49%) of them unmarried in the control group, with clear significant difference (stat. = 0.172; P-value = 0.038<0.05). The study was free from all forms of hazards. (see Table 1 for details).

Table 2: Statistics showing the effect of REDMP on OIED and significant differences within groups (N=236)

Intervals	Tool	Groups	M±SD	SE	95% CI	F	P-value	h2p
DR2								
Pretest	PED	Experimental	27.85±0.090	2.08	22.56–19	.232	1.091	0.944
		Control	26.11±1.018	2.08	23.04–21	.251		
Posttest	PED	Experimental	18.99±0.071	0.05	18.24–28	.522	2.061	
		Control	25.37±0.182	0.05	15.30–26	.401		
Follow-up	PEDE	Experimental	17.05±0.042	0.97	17.33–31	.642	1.090	0.110
		Control	26.33±0.008	0.97	14.71–27	.511		

PED=profile of emotional distress, DR2=adjusted R2, Inst=instrument, %= percentage, h2p=partial eta squared, SE= standard error, CI=confidence interval, mean ± SD=mean and standard deviation, N = sample size.

The effect of REDMP on OIED and the significant differences within groups were presented. From the Table, there was no observed significant difference on the mean response scores of the participants in the experimental (27.85±0.090) and control groups (26.11±1.018) on PED pretest, F=1.091, P=0.944>0.05, h2p =0.423, DR2=0.101, SE=2.08. Also, the Table recorded no significant difference on the mean response scores of the participants in the experimental (17.05±0.042) and control groups (26.33±0.008) on PED follow-up measure, F=1.090, P=0.110>0.05, h2p =0.990, DR2=0.313, SE=0.97. Furthermore, the Table recorded significant difference between the participants in the experimental (18.99±0.071) and control groups (25.37±0.182) on PED posttest scores, F=2.061, P=0.008, h2p=1.020, DR2=0.521, SE=0.05. The participants in experimental group recorded lower mean scores in the posttest (18.99±0.071) and follow-up (17.05±0.042) PED measures when compared to pretest scores (27.85±0.090). Also, the post test PED scores (18.99±0.071<25.37±0.182) and the follow-up mean scores (17.05±0.042<26.33±0.008) of the participants in experimental group were lower when compared with the posttest and follow-up PED scores of those in the control groups respectively. This implied that REDMP has significant effect in managing OIED among TSNC. (see Table 2).

III. DISCUSSION

The present study determined the effect of REDMP on OIED among TSNC. The study shows that REDMP has significant effect in managing of OIED among TSNC. This was demonstrated within groups (experimental and control) and intervals (pre-treatment, post-treatment and follow-up). For instance, the participants in the experimental group

showed low level of OIED when compared to high level of OIED as reported by their counterparts in the control group in both post-treatment and follow-up intervals. Also, the participants in the experimental group showed high level of OIED in the pre-test measure while low level of OIED was reported at post-test and follow-up measures. Finally, the participants in the control group showed low level of OIED in the pre-test measure while high level of OIED was reported at post-test and follow-up measures respectively. These variations in the levels of OIED between groups and intervals are attributable to the REDMP delivered to the participants in the experimental group. Our study therefore concludes that REDMP is reliably effective in the management of OIED among TSNC. Also, the application of REDMP is recommendable for alleviating other psychological health problems such as depression, stress and anxiety among workers in occupational environment. These findings have obvious implications to health, research, education and policy. Firstly, health programs are reliable tools to manage occupational-induced emotional distress among workplace. Secondly, the obvious research gap on literature and the current study is covered. Thirdly, health policies can be formulated through proper integrations of these findings.

The findings of our study are in consistent with the reports of other researchers who found program such as the present significantly effective in addressing different health and psychological cases. For instance, Onyechi et al. [25] reported the significant effect of rational-emotive hospice care therapy (REHCT) on problematic assumptions, death anxiety, and psychological distress among cancer patients and their family caregivers. Similarly, Ogbuanya et al. [8] applied rational emotive behaviour coaching (REBC) in mitigating occupational stress and improve work ability among electronics workshop instructors. Ugwoke et al. [7] reported the significant effect of rational-emotive health education intervention (REHEI) on stress management, and irrational beliefs among technical college teachers. Also, Onuigbo et al. [26] reported the significant effect of rational emotive behavior therapy program (REBT) on the management of depressive symptoms among university students with blindness. Onuigbo et al. [27] equally found the significant effect of rational emotive behavior therapy (REBT) on stress management and irrational beliefs among special education teachers in Nigerian elementary schools. Igbokwe et al. [20] reported the significant effect of rational-emotive behavior intervention on managing burnout symptoms among postgraduate students in public universities. Similarly, Ogba et al. [12] reported that rational emotive occupational health coaching control trial was effective in managing job stress in teachers of children with autism. Also, Onuigbo, Onyishi, and Eseadi [28] showed the clinical benefits of rational-emotive stress management therapy for job burnout and dysfunctional distress of special education teachers. Ugwu et al. [19] reported the significant effect of rational-emotive distress management intervention on work-related emotional distress among primary healthcare workers. Also, Ugwu et al. [21] reported the significant effect of rational-emotive burnout management programme on occupational burnout among health and physical education college teachers in Nigeria. The above evidences demonstrate the existence of similar programs and their significant effects in managing emotional and psychological health problems.

Teachers of special need children experiencing high level of OIED are vulnerable to poor job satisfaction, emotional trauma, low productivity, low service delivery, increased health expenses, absenteeism, and other conditions including irrational beliefs, psychopathological conditions, and maladaptive behaviors [4]. The REDMP aims at combating irrational beliefs and negative emotions. Other scholars shared similar view [29-31]. The outcome of this study may be adopted by occupational health professionals and psychologists in proffering solutions to the management of occupational-induced emotional distress. Our study reported no statistically significant difference on gender, age, and location while differences existed on years of service delivery and marital status. Within intervals, significant difference was observed in post treatment measure while none existed on pretest and follow-up measures.

The adoption of appropriate research design justified the strength of the present study. However, some limitations were reported. Future studies adopting mixed-design are recommended. Also, there is need for using combined methods of data collection including focus group discussion, interviews, and observation schedules, other than the use of PEM. Other variables such as religious affiliation and ranks of the participants should be verified and statistically significant differences be reported.

IV. CONCLUSION

The REDMP has significant effect on OIED among TSNC. The adoption of reliable programs (such as REDMP) by professionals in managing emotional and psychological health problems is crucial in occupational settings.

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