

# Efficacy of Rational Emotive Career Counselling Programme on Occupational Stress Management in Industrial Hazard Victims: Safety Practice Implications

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## Abstract

Occupational work hazards in workplaces in Nigeria have been disturbing issues among workers due to the harms and risks associated with them. These have exposed workers to stress and mixed feelings about their job demands, roles, and relationships. With that in mind, this study investigated the efficacy of rational career education intervention on occupational stress management in industrial hazard victims in institutions of learning. A pure-experimental design was employed for the study. A total of 80 technicians participated in the study. A dependent measure was used to assess the conditions at three points. Data collected were analyzed using a multivariance statistical analysis. The result showed that technical workers in the experimental group that received the intervention had a significant reduction in their OS after the intervention and at the follow-up, phase compared to their counterparts in the control group. The finding of this study has shown that the intervention is significant in helping technical workers in technical colleges reduce their OS. With these findings, this study concludes that rational emotive career counselling programme is an effective intervention for technical workers with occupational stress, therefore, occupational therapists in industries should recommend this for their clients.

**Keywords** Rational emotive career counselling programme · REBT · Occupational stress management: irrational career beliefs · Industrial hazard victims

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#### Introduction

Occupational stress (OS) is found to be identifiable among metal and technical staff. This is because it induces heightened tensions towards the completion of tasks (Amehule, 2019). OS could be favourable or unfavourable (Nwadike, 2003). OS is favourable when it motivates or spurs one to timely and effectively complete statutory and non-statutory responsibilities (Ebitimi, 2017). More so, OS is favourable when it encourages and sustains one to the actualization of assigned duty (Ebitimi, 2017). It is normal and stressful but is directed towards bringing out the best from the workers (Madu, 2019).

On the other hand, unfavourable OS is acute and chronic in nature (Olele, 2018). Unfavourable OS were found to have a negative impact on the productivity of technicians in the school (Yusuf et al., 2015a, 2015b). It is averse in nature that it dampens the thinking and creativity of technicians (Ajibode, 2018; Branbaifa, 2019; Ekeh, 2019). This type of OS impedes reasoning, innovation, and invention. It is abnormal OS that it distorts time for the completion of tasks among technicians (Ighoho, 2019). Unfavourable OS reduces the level of job commitment and dedication (Agu, et al., 2018; Musheed, 2018). Unfavourable OS affects the emotional dispositions of the technician in the field of Science and Technology across the school system.

Unfavourable OS makes the technician to be emotional thereby using abusive words during practical training (Isa, 2017; Ukaigwe, 2018). Unfavourable OS among technicians as a result of job demand leads to frustration, depression, anxiety, anger, oppression, depression (Kyriacou & Chien, 2004). Technicians across the school system generally suffer severely from unfavourable OS because of their job demand and orientation and as such lowers inter-personal and intrapersonal relationships (Bland, 1999). It has been proven that unfavourable OS is one of the root causes of mood swings among technicians domiciled in the institutions (Nwagbara, 2015; Uzondu, 2011).

More so, unfavourable OS devastates and lowers the morale of technicians (Makinde, 2017; Nwagbara, 2015) and makes technicians who are keenly involved in technical workshop practices always express concern over the devaluation of their emotional dispositions and restricted lifestyle (Ikechukwu, 2018; Mahood, 2018). Unfavourable OS promotes negative attitudinal disposition among the greater proportion of technicians in the school institutions (Mbah, 2013). Unfavourable OS is traceable to an increase in work pressure (Dua, 1994; Fisher, 1994; Winefield et al, 2002). Unfavourable OS is traceable to family conflict, job competition, poor funding, poor administrative style, poor governmental support and changes in leaders (Gillespie et al., 2001). It was empirically proven that 75% of technicians experience prolonged hours of job, work padding and little support, increase in practical dependent ratios, fear of the unknown, and poor reward management system (Eagle, 2012; Hellriegel et al., 2005; Winefield, et al., 2002) and as such are poorly satisfied with their jobs amounting to building up of unfavourable OS (Watts et al., 1991). This increase in unfavourable OS is a pointer that the institutions of learning do not provide enabling environment

that can help the technicians manage their emotions and overlapping job responsibilities (Tytherleigh et al., 2005). Devastatingly, studies across the globe as well as in Nigeria have found high unfavourable OS among technicians across the educational industries (Coetzee & Rothmann, 2005; El Shikieri & Musa, 2012; Ojedele 2007; Tytherleigh et al., 2005; Winefield et al., 2002). In addition to the unfavourable OS, these technicians in Nigeria are exposed to high chemical, mechanical, environmental, and physical threatening factors which are hazardous to health and devastate emotional uprightness (Mokaila, 2018). Some of them inhale poisonous chemicals, have machine cuts, exposure to rays, have spills of corrosive chemicals, and worst still do not have enough quality protective devices that can shield them from the work and environmental-related dangers they are exposed to leading to irrational thoughts about their career in this direction (Mokaila, 2018). Unfavourable OS globally is responsible for 20% and 15% sicklisted male and female workers (Arbetsmiljoverket, Swedish Work Environment Authority, 2016; Regerringens-Skrivelse, 2018). Unfavourable OS causes mental disorder which interferes with workers' productivity (Arbetsmiljoverket, Swedish Work Environment Authority, 2016; Eurofound, 2016). These workers battle with stress before it degenerates into applying for sick leave which can lower productivity (Virtanen et al., 2007). The place of intervention in the management of work related-stress-disorders especially in in reducing lost hours in the job is needful (Holmgren et al., 2009). To this end, it becomes very imperative for occupational stress management in order to reduce the irrational thoughts and beliefs that technicians have about their job.

It is reported that irrational belief about the safety of life and career advancement is one of the prime causes of unfavourable OS among laboratory workers that lower their productivity level (Babajide, 2018; Muazu, 2018). Technicians who are stressed for a long time have negative unjustifiable reechoing thought pattern that impedes their job excellence (Michelle, 2018a, 2018b; Mustapha, 2018). It is worrisome to note that most of the technicians in the school system who hang together to entertain unwholesome discussion about the negative nature of their job disposition have lowered achievement quotient to the job (Agumba, 2018; Oluwa, 2018). Therefore, irrational beliefs about technical workshop activities in the schools with high negative perceptions about sudden death on work-related issues are major constraints to job effectiveness and efficiency (Mustapha, 2018; Oluwa, 2018).

This irrational belief on the career direction of technicians in technical colleges is further exacerbated by the fact that they do not see their career to be equally weighted with that of professions. Most of the technicians at this level display a lot of inferiority complex in their careers when in close contact with technologists (Onuchukwu, 2016). More disheartening also, most technicians in the schools perceive their vocation to be for the least qualifications as against those of the technologists (Ibeh, 2017). Some of the technicians reported that they take up a career in the schools in order to gain experience for other higher and better job opportunities (Davis, 2014). These misconceptions are in tune with these unrealistic beliefs based on preconceived perceptions associated with irrational beliefs (Elis et al., 2010).

Unrealistic belief pattern has a significant negative impact on an individual's career decision and career development (Bullock-Yowell et al., 2011; Gales & Lenz, 2013; Jamali et al., 2015). Irrational career belief affects thinking, reasoning, processing, and assimilation of information and hampers an individual's career decision-making towards successful career development. Irrational carrier belief influences poor job commitment (Nzokurum, 2011; Ozioko, 2012; Mogoaşe et al., 2013; Ohia, 2014; Mbanefo, 2019).

It was suggested that career education has a prominent role in identifying, redirecting, and addressing irrational career thoughts and beliefs among students (Aguilar, 2018; Ifeanyieze et al., 2021; Ogbuanya et al., 2018). This career education has the potential to remove or address unjustifiable thoughts like: I will not have a befitting title in technical colleges, the career does not permit one to stay all long in the office, the career is close to those who do auto mechanic because of how dirty they look, it will take time for me to be recognized by the society, I may not be bold to mention my career to people, and that the career is for the rejected among others. These are thoughtful schema of individuals with irrational career beliefs. These thought patterns cannot support productivity if they are not addressed (Mbanefo, 2019). This may affect the acquisition of requisite skills, knowledge, competence as well as sound decision making (Ibrahim et al., 2017). Some studies have suggested the efficacy of cognitive behavioural approaches in the reduction of career-related issues (Ibrahim et al., 2017; Margaretha & Hastuti, 2017; Ogbuanya et al., 2017, 2018). Past empirical literature advocated for a psychotherapeutic approach that could demystify, disorientate and dispute negatively defeating thoughts and beliefs that can impair and hamper career decisions (Eze et al., 2016). This implies that technicians in colleges who are faced with irrational career defeating thoughts and beliefs may require cognitive and behavioural-counselling approaches that would help them address and readjust those unjustifiable thoughts and beliefs for better career achievement. The cognitive behavior approach is counselling strategy or psychotherapeutic approach that uses counselling methods, techniques, designs, and procedures to assist the client to defeat irrational beliefs (Otta, 2005).

Irrational thoughts and perceptions may be corrected with rational exposition technique. The rational exposition on career deals with the correction of irrational career self-doubts, perceived heightened work challenges, and altered thought patterns (Mills et al., 2008). This is achieved through cognitive restructuring which is targeted at helping one dispute irrational career thinking and belief with career thinking and belief. The cognitive and behaviour restructuring approach has worked in other populations of people with irrational career thought and belief patterns and is expected to be impactful in the reduction of irrational career beliefs of lecturers in technical colleges who express displeasure in the cognitive demands associated with their work which also affect their perception about the work (Khaledian et al., 2013). This is stemming from the efficacy of REBT in addressing irrational thought and behavioural issues which could also be meaningful in demystifying unfounded job wrong perceptions in order to achieve efficiency in task areas. Poor work conditions such as poor salary structure, lack of offices, poor teaching classroom, unequipped workshops, delay in promotion, an overwhelming number of

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students, poor electricity supply, workload and publish or perish syndrome are integral in the development of irrational thinking and beliefs about the lecturing profession (Danjuma, 2018; Isa, 2017; Abraham, 2019).Some of these lecturers reported high rates and exposure to electrocution, inhalation of poisonous and dangerous gases, attack from corrosive substances, body injuries from heavy-duty machines, eye problems as a welder and fabricator (Ayo, 2018; Njoku, 2018).

The rising nature of irrational thoughts and poor belief systems has necessitated the use of an emotive and cognitive treatment approach in handling irrational thoughts and self-defeating beliefs among lecturers in technical colleges. Empirically, it has been proven that Rational Emotive Behavioural Therapy is effective in the reduction of cognitive and behavioural issues among students in technical colleges (Ogbuanya et al., 2017). The REBT approach helps recognize, demystify, distort, and alter irrational career beliefs conflicting with their commitment and dedication to their career advancement (Abraham, 2019; Ifeanyieze et al., 2021; Njoku, 2018). The efficacy of Rational Career Education Intervention (RCEI) has been proven to reduce irrational career beliefs among agricultural education students both at the posttest period and overtime at the follow-up time (Ifeanyieze et al. 2021). However, the study conducted by Ifeanyieze et al. (2021) did not harness career counselling rooted in human belief systems and emotive elements. In addition, the study failed to propose straightforward philosophies that reflect career and guide the development line. It lacks the structure that represents an intervention. Besides, there is only one available rational-emotive intervention that is career-driven (Ogbuanya et al., 2017); implying that there is no alternative to that. Given these reasons, we created the rational-emotive career counselling programme (RECCP) to fill the gaps. The aim of RECCP is to reduce occupational stress originating from irrational career beliefs among industrial hazard victims in technical schools.

Therefore, this study tested the efficacy of RECCP on occupational stress management (OSM) among industrial hazard technicians in Imo State, Nigeria. Based on this, the researchers hypothesized that: 1) there will be a significant difference between mean ratings of participants in the treatment group and those in the control group at pre-test and post-test, 2) there will be a significant difference between mean ratings of participants in the treatment group and those in the control group at the post-test stage, and 3) there will be significant time  $\times$  group interaction effect for the management of occupational stress of participants in the treatment group and control group.

## Method

#### Ethical Adherence

The Faculty of Education, University of Nigeria gave approval for this study. We also received permission to conduct this study from the institutions where the

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participants were working. Finally, the participants gave assent before they were allowed to participate in the study.

#### Measure

Occupational Stress Index (OSI) was developed by Srivastava and Singh in 1984. The OSI is a 46-item measure that assesses the level occupational stress. The measure was structured having five response options of Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4), and Strongly Agree (5) respectively. The higher the score on a particular item the higher the weight on that item. The OSI has 12 clusters of Role Overload-6items, Role Ambiquity-4items, Role Conflict-5items, Political Pressure-4items, Responsibility for Persons-3items, Intrinsic Impoverishment-4items, Low Status-3items, Strenuous Working Conditions-4items, Unprofitability-2items respectively. The split-half correlation for the odd-even numbers and internal consistency by Cronbach alpha was estimated at 0.94 and 0.90 respectively (Srivastava & Singh, 1984). In the quest to revalidate the instrument OSI, the present researchers found the overall internal consistency reliability coefficient of 0.89 through Cronbach alpha. Furthermore, the present researchers found the internal reliability coefficients for the clusters thus: Role Overload-0.77, Role Ambiguity-0.69, Role Conflict-0.58, Political Pressure-0.71, Responsibility for Persons-0.81, Intrinsic Impoverishment-0.80, Low Status-0.72, Strenuous Working Conditions-0.88, and Unprofitability-0.68 respectively. The essence of confirming the validation is to ensure that the OSI is made fully homegrown to the peculiarities of the technicians in the technical colleges in Imo State, Nigeria.

#### **Participants and Procedure**

The participants were 80 technicians with OS. The power of the sample size was ascertained using GPower 3.1 software (Faul et al. 2007). The demographic information of the participants was gender (40males and 40females), with age (18–30, 31–35, 36 years and above), location (Urban and Rural), experience (1–5 years and 6 years and above), and family size, etc. The inclusion criteria for a participant to be eligible in this study are (1) the participants must have been diagnosed using Occupational Stress Index, (2) the participants must be a technician in institutions of learning, (3) must fill out an interest form, (4), must have been a victim industrial hazards, and (5) those who are not on regular study. Exclusion criteria are (1) the participants with health issues (2) participants in one form of experimental study or the other (3) participants with obvious emotional problems, (4) those that did not complete the interest form.

The researchers were able to recruit 80 technicians from the 89 population of the technicians that displayed OS alongside ICBs and those that met the inclusion criteria. These 80 participants were examined at time 1 (pretest) using OSI in order to determine their entry conditions. After this process, the participants were equally

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Fig. 1 Selection and flow of participants in the occupational stress trial: the CONSORT flow diagram

assigned into the experimental and control groups. The experimental group consists of 40 participants as well as the control group with 40 participants, see Fig. 1.

Those in the treatment group were exposed to RECCP while those in the control group were given conventional counselling. The treatment package RECCP was administered in English Language by the REBT experts and school counsellors to the experimental group.

It is worthy to note that all the participants keenly participated and completed all the sessions. This goes a long way to indicate that the researchers had 100% participants' compliance level in the twelve sessions. This level of compliance can be attributed to the fact that the researchers conveyed the participants in one coaster bus to the venue of the experiment in Imo State also provided them with food worth 3US Dollars on each contact until the end of the session. The participants in the experimental group and the waitlisted control were both administered treatment Time 2 at the completion of the twelve sessions. Three months after the treatment, the follow-up session was ensured in order to ascertain the durability retention level of the RECCP on the participants through the administration of test Time 3. The waitlisted group was also subjected to the same measure of treatment in order to help them manage their occupational stress and irrational career beliefs. This last stage brought the whole exercise to a formal closure.

The researchers used five school-based counsellors that volunteered to render service in the programme. These counsellors proved to be well experienced in the usage and application of REBT principles. These counsellors had educational qualifications that ranged from masters degree to doctor of philosophy in counseling. The least of them is aged 24 years while the oldest of the counsellors was 37 years of age. Despite their experience in the application and usage of REBT principles, the researchers briefed them according to the operational requirements such as the time frame, venue, and the number of weeks, breakdown of the programmes, and duration of the programme for effectiveness and efficiency in the discharge of the exercise.

## Intervention

Rational Emotive Career Counselling Programme (RECCP) manual developed by the present researchers and was aimed to improve stress management of technical staff. The RECCP consists of 12 sessions with one contact per week. Each session lasted for an hour. The first and second sessions marked the proper introduction. The third to six sessions focused on the identification, irrational career belief, how to dispute irrational career thoughts and erroneous perception of work stress. The seventh to tenth sessions were followed by consolidation on the gains made on the disputation of irrational career thought and erroneous career stress. The sessions were solution-based and focused in order to help the participant take full charge of their career decisions in order to reduce unwanted stress. The eleventh and twelfth sessions were also loaded with activity-based practices to examine how the participants have been able to put the various techniques into practice as a way of handling their irrational thoughts and unwanted stress building. The sessions were properly structured to make provisions for revision and feedback mechanisms.

## **Therapists (School Counsellors)**

The therapists who took part in the activity were experts in school counselling. The qualifications of these therapists ranged from Maters to PhD. The therapists who were used have at least seven years of relevant experience and are well-versed in occupational and school counselling. These therapists aided the researchers in delivering English-language therapy packages to the experimental group. The therapists are school counselors with extensive therapy experience. They have also had prior experience with REBT and its tactics. Their tasks and roles were based on the use of REBT's ABCD steps.

## Fidelity of the Treatment Implementation

As per quality practice, we engaged three independent external assessors to monitor the treatment implementation process. The assessors were postgraduate students of

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guidance and counselling. Ideally, the major roles were to keep their eyes on the therapists and participants' activities from the first day to the end. They recorded the time of arrival of the two parties, level of emotional and behavioural responses, techniques applied, and therapists' approach daily. The researchers ensured that the assistants adhered strictly to the demands of the treatment package.

#### Treatment as Usual (TAU)

The participants assigned to TAU were those exposed to conventional counselling. The treatment was delivered by the institutional counsellors. Like those in the RECCP group, conventional counselling participants were also exposed to 12-session targeted to reduce work deviance among technical staff.

#### **Study Design and Data Analysis**

The study was a randomized-control-trial pretest–posttest control design. This design allows participants to be allocated to the various groups of experimental and control with emphasis on the treatment of the experimental group. The group-randomized trial design makes use of randomization, control group, as well as ensuring internal validity by the use of treatment clinical trials (Ezegbe et al., 2019; Ede et al., 2019; Nwokeoma et al., 2019).There is also equal random assignment of the participants to the control and experimental groups (Cohen et al. 2007). The repeated measures 2-way Analysis of Variance (ANOVA) was the statistical technique used to determine the effect of RECCP on OSM of lecturers in technical colleges. More so, the Partial eta square and adjusted R<sup>2</sup>values were used to determine the effect size of the RECCP on OSM of lecturers in technical colleges. The analysis was done using Statistical Package for Social Sciences (SPSS) version 18.0. There was no missing data during data analysis.

## Results

Table 1 shows that there is no significant difference in the demographic characteristics of participants in the experimental and control groups. The results shows that the RECCP and control groups has no significant difference with regards to the participants gender ( $\chi^2=0$  0.065, p=0.799); educational qualification ( $\chi^2=4.643$ , p=0.200); age ( $\chi^2=0.525$ , p=0.769); years of experience ( $\chi^2=2.547$ , p=0.467); marital status ( $\chi^2=6.087$ , p=0.107).

Table 2 showed the mean occupational stress of the experimental group (M=100.25, SD=6.53) and the control group (M=104.90, SD=6.01) at the pretest as measured by OS. However, at the posttest and follow up measures, the mean occupational stress of the experimental group are (M=64.86, SD=6.84), (M=66.46, SD=5.71) while those of the control group are (M=68.25, SD=8.77), (M=64.50, SD=4.49) as measured by OS.

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Demographics	Treatment n/%	Control %	$X^2$	Р	
Gender					
Male	29(72.5)	30(75.0)			
Female	11(27.5)	10(25.0)	.065	.799	
Educational qualific	cation				
SSCE	8(20.0)	14(35.0)			
Nigeria Certificate in Education	5(12.5)	5(12.5)	4.643	.200	
Bachelor's degree	22(55.0)	13(32.5)			
Master's degree	5(12.5)	8(20.0)			
Age					
Below 30 years	17(42.5)	14(35.0)			
30-40 years	14(35.0)	15(37.5)	.525	.769	
41-55 years	9(22.5)	11(27.5)			
Years of experience					
Below 5 Years	10(25.0)	8(20.0)			
5-10 Years	17(42.5)	15(37.5)	2.547	.467	
11 16Years	7(17.5)	13(32.5)			
17-23Years	6(15.0)	4(10.0)			
Marital status					
Single	15(37.5)	9(22.5)			
Married	14(35.0)	25(62.5)	6.087	.107	
Separated	7(17.5)	7(10.0)			
Divorced	4(10.0)	2(5.0)			

% = Percentage;  $X^2$  = Chi-Square; p = Probability value

		Pretest		Posttest		Follow-Up	
Group	Gender	Mean	SD	Mean	SD	Mean	SD
RECCP		100.25	6.53	64.86	6.84	66.46	5.71
Control		104.90	6.01	68.25	8.77	64.50	4.49
RECCP	Male	101.24	6.042	65.88	6.56	65.98	5.20
	Female	97.64	7.35	62.18	7.17	67.73	6.98
Control	Male	105.14	6.30	68.42	7.91	65.35	4.62
	Female	104.16	5.29	67.77	11.45	61.97	2.99

SD Standard Deviation

Table 3 reveals the treatment outcomes for the participants enrolled in the treatment compared to those in the control group (CG) over the three times assessments. Before the treatment, the result in Table 3 shows that there was no significant difference among the treatments and control groups at baseline evaluation of occupational stress in participants as measured by OS, F(3, 79) = 10.744,

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Table 2 Descriptive analysis of

groups and gender

Table 1Demographiccharacteristics of theparticipants

Source	Dependent variable	Type III sum of squares	Df	Mean square	F	Sig	Partial Eta squared
Corrected Model	CWJpre	541.508 <sup>a</sup>	3	180.503	4.627	.005	.154
	CWJpost	413.607 <sup>b</sup>	3	137.869	4.607	.005	.154
	CWJFello	186.644 <sup>c</sup>	3	62.215	2.431	.072	.088
Intercept	CWJpre	644,004.261	1	644,004.261	16,507.070	.000	.995
	CWJpost	232,769.669	1	232,769.669	7779.009	.000	.990
	CWJFello	263,353.860	1	263,353.860	10,288.678	.000	.993
Group	CWJpre	419.164	1	419.164	10.744	.002	.124
	CWJpost	91.856	1	91.856	3.070	.084	.039
	CWJFello	157.860	1	157.860	6.167	.015	.075
Gender	CWJpre	81.129	1	81.129	2.079	.153	.027
	CWJpost	11.855	1	11.855	.396	.531	.005
	CWJFello	10.348	1	10.348	.404	.527	.005
Group * Gender	CWJpre	26.583	1	26.583	.681	.412	.009
	CWJpost	118.776	1	118.776	3.969	.050	.050
	CWJFello	101.531	1	101.531	3.967	.050	.050
Error	CWJpre	2965.052	76	39.014			
	CWJpost	2274.132	76	29.923			
	CWJFello	1945.332	76	25.596			
Total	CWJpre	845,244.901	80				
	CWJpost	306,190.942	80				
	CWJFello	345,180.689	80				
Corrected Total	CWJpre	3506.560	79				
	CWJpost	2687.739	79				
	CWJFello	2131.976	79				

 Table 3
 Multivariate analysis of the effect of RECCP on occupational stress management in industrial hazard victims in institutions of learning

<sup>a</sup>R Squared = .154 (Adjusted R Squared = .121)

<sup>b</sup>R Squared = .154 (Adjusted R Squared = .120)

<sup>c</sup>R Squared = .088 (Adjusted R Squared = .052)

p = <0.002,  $\eta_p^2 = 0.124$ . At the post-treatment level (Time 2), intervention had a significant effect on occupational stress in participants as measured by OS, F(3, 79) = 3.070, p = 0.084,  $\eta_p^2 = 0.039$ ; and after the post-treatment, a follow-up (Time 3) result still shows that intervention had a significant effect on participants' occupational stress of participants as measured by OS, F(3, 79) = 6.167, p = 0.015,  $\eta_p^2 = 0.75$ . The result further shows that there is no interaction effect of therapy and gender at Time 2, F(3, 79) = 3.969, p = 0.050,  $\eta_p^2 = 0.050$ . The effect size of the independent variable at Time 2 for the dependent measure (OS) was 0.039. This value indicates that treatment variable accounted for the effect in reducing occupational stress scores of participants (Fig. 2).



Fig. 2 Interaction effect of treatment and gender

#### Discussion

The result showed that technical workers in the experimental group that received RECCP had a significant reduction in their OS after the intervention and at the follow-up, phase compared to their counterparts in the control group. The finding of this study has shown that RECCP is significant in helping technical workers in technical colleges reduce their OS. This study provides credence to the finding that revealed the utility of REBT in helping people with work-induced stress (Madu, 2019; Olele, 2018). This study has also affirmed the effectiveness of the use of REBT which RCEIP employed its principles in the management of work-associated stress and distress (Macavei & Miclea, 2008). Thus, the application of emotional and cognitive interventions can help manage productivity-threatening factors such as work stress (Uzondu, 2011; Nwabara, 2015; Li et al., 2017). It is worthy to note that the application of RECCP can effectively help lecturers in technical colleges to properly and effectively manage work-related and associated demoralizing stress. It has been shown in previous studies that REBT assumption is useful for career workers and occupational development and growth (Abiogu et al., 2021; Nwokeoma et al., 2019; Ogakwu et al., 2022; Ogba et al., 2019).

Furthermore, the result also revealed that career lecturers who were exposed to RECCP were reduced and sustained across the follow-up period compared to those in the control group. This study supported the previous studies that revealed the effectiveness of REBT in the reduction of their career (Adegun & Aremu, 2013; Farokhzad, 2012; Khaledian et al., 2013). The effectiveness of RECCP in the reduction of OS of lectures in technical colleges was because it integrated the principles of REBT in the treatment and intervention process. The school authorities of technical colleges should provide a roadmap that will allow the use of RECCP principles in the reduction of lecturers' OS in technical colleges. The application of

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RECCP should be done by REBT experts and qualified counseling psychologists. The study was unable to ascertain whether the subjects have been subjected to any form of OS management programme. This study was limited based on the fact that it was unable to sample all the lecturers in the public and private technical colleges in South-East Nigeria. Based on the limitations recorded in this study, future studies should ascertain the respondents' exposure to OS programmes before the actual intervention programme. Future studies should endeavour to sample private and public technical colleges across the South-East region.

## Conclusion

The adoption of the principles of REBT in the application of RECCP on technicians with unfavourable OS has proven to be very effective in the reduction of this self-downing, unjustifiable and unfounded work-induced stress and its attendant irrational belief systems. The researchers concluded that the study would serve as a therapeutic manual to reduce unfavourable work-induced stress among technicians. The findings of this study can be revalidated through the constant application of RECCP on technicians with unfavourable OS.

## Implications

The study has proved that RECCP significantly reduces unfavourable occupational stress among technicians. Therefore, practitioners like psychotherapists, school counsellors, and psychologists would be very rewarding in helping them to handle instances of occupational stress and irrational career beliefs. The application of RECCP has been proved to have long time effect and should be continuously applied in the handling of issues related to occupational stress and irrational beliefs for a period not less than five years in the institutions. It is also recommended that the school authorities will ensure that all the school counsellors, psychotherapists, and psychologists should constantly study the principles used in RECCP for the required result to be achieved on the population of technicians that have occupational stress and irrational career beliefs. Finally, safety practices will be enhanced and guaranteed to a reasonable extent since the technicians will be working with their right frame of mind devoid of acute stress and irrational thinking. The school authorities will experience improved participation and production by technicians in their various areas of specialization without much unsafe acts. The level of casualties of technicians in the institution will be reduced when there is proper application of RECCP.

#### Strengths of the Study

As noted in limitation section, this study has some strengths. Firstly, this is one of the few studies conducted on technicians using REBT principles. Secondly, this study was able to coopt volunteer counsellors with a postgraduate qualification in counselling with requisite cognate experiences in counselling and in the usage of REBT.

#### Limitations of the Study

The study was faced with the following limitations: (1) the study excluded those who were employed but still undergoing documentation who have occupational stress and irrational career belief (2) the study did not include technologists who have occupational stress and irrational career beliefs (3) the study did not make use of focus group that would have generated qualitative data. Based on the identified limitations, the researchers recommended that future researchers should make use of technicians and technologists are the participants. Future researchers should include focus groups in order to gather qualitative information through interviews, checklists, and observation schedules that will help authenticate the quantitative data.

#### Declarations

Conflict of interest The researchers unequivocally declared no form of conflict amongst them.

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