

EFFECTIVENESS OF STRESS INOCULATION AND COMMUNICATIVE SKILL TRAININGS ON ANGER AMONG SECONDARY SCHOOL TEACHERS IN EDUCATION DISTRICT II, LAGOS STATE

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Abstract

Anger is a very common emotion for teachers with potential adverse effects for themselves and their students. Anger among secondary school teachers remains relatively under explored area of research. Anger amid teachers need to be addressed for it can contribute to negative classroom atmosphere; hindering students' cognitive and emotional development. Study examined the effectiveness of stress inoculation and communicative skill trainings among secondary school teachers in Education District II, Lagos State. The research design used for the study was the quasi experimental pretest-posttest control group. The population comprised of all teachers in Education District II of Lagos State. Simple random and purposive sampling was used to select a sample size of 71 consisting of 29 male and 42 female. The Perceived Stress Scale and Clinical Anger Scale were used to collect relevant data. Data collected were analyzed using mean, standard deviation, mean difference and analysis of covariance. The hypotheses were tested at 0.05 level of significance. The study found out that there is a significant difference in the post-test mean scores on anger among participants exposed to stress inoculation training, communicative skill training and control group. Also, it was observed that there exist no gender difference in the post-test mean scores on anger among participants across the treatment and the control groups. It was recommended that regular training on stress inoculation training and communicative skill training should be used to mitigate the effect of stress encountered at work.

Keywords: *Anger, Communication Skill Training, Education District II, Stress Inoculation Training and Teachers.*

Introduction

In the dynamic realm of education, teachers play a pivotal role in shaping young minds. Specifically, secondary school teachers are entrusted with the formidable task of nurturing the intellectual and emotional growth of adolescents, find themselves navigating a complex landscape fraught with challenges. However, the teaching profession is not without its challenges, and one prevalent yet often overlooked aspect is the experience of

anger among secondary school teachers. Teaching involves navigating a myriad of complexities—student behaviour, administrative demands, curriculum pressures, and societal expectations. The amalgamation of these factors can give rise to heightened stress levels, ultimately manifesting as anger in educators. Kilag, Yamson, Bocao, Corodova and Sasan (2023) identified stress and anger are common emotions that affect individuals in all walks of life. But specifically in the educational sector, the pressure can be intense, given the high expectations placed on educational leaders, which could be budget constraints, a shortage of teachers, inadequate infrastructure, and a lack of resources.

Teaching in secondary schools is a multifaceted role that extends beyond the dissemination of knowledge. Educators bear the responsibility of molding young minds, managing diverse classrooms, and addressing the unique needs of adolescent learners. The dynamics of the classroom environment, coupled with external factors like standardized testing, administrative expectations, and societal scrutiny, create a high-stakes backdrop where emotions, including anger, can manifest. The teaching profession is highly stressful and it is associated with poor health outcomes such as psychological distress and burnout (Ozoemena, 2021).

Understanding the triggers of anger among secondary school teachers is pivotal for unraveling this complex phenomenon. Classroom disruptions, student misbehaviour, heavy workload, inadequate support systems, and systemic challenges can contribute to heightened stress levels, culminating in expressions of anger. Moreover, the emotional labour involved in teaching, combined with the emotional volatility of adolescence, creates a fertile ground for the emergence of this powerful emotion.

The manifestations of teacher anger are diverse, ranging from subtle frustration to overt expressions of displeasure. These emotions can impact not only the well-being of educators but also the classroom atmosphere and student-teacher relationships. Exploring the nuanced ways in which anger surfaces is integral to developing targeted interventions for its mitigation.

Teacher anger is not a solitary experience; its repercussions extend beyond the individual to influence the educational ecosystem. Persistent anger can contribute to burnout, diminished job satisfaction, and even attrition within the teaching profession. This not only jeopardizes the well-being of educators but also compromises the continuity and stability of educational institutions.

Furthermore, the emotional climate in the classroom significantly influences the learning environment. Teacher anger, if unchecked, can contribute to a negative classroom atmosphere, hindering students' cognitive and socioemotional development. Understanding the potential impact of teacher anger on both educators and students is imperative for fostering a healthy and constructive educational environment.

Despite its prevalence, anger among secondary school teachers remains a relatively underexplored area of research. This study seeks to bridge this gap by conducting a comprehensive examination of the factors contributing to teacher anger, its manifestations, and its impact on educators and students. The research endeavors to provide valuable insights that can inform evidence-based interventions, support systems, and policy changes to enhance the overall well-being of secondary school teachers and promote a positive educational experience for students.

Stress inoculation training is typically about preparing individuals to handle stressors. It has been used both in medicine and in social-psychological research on attitude change. SIT can be viewed as an engaging way to help clients become aware of the impact of their narratives and maladaptive stress-engendering behaviors. SIT helps distressed individuals become aware of how they can engage in behaviors, maintain and exacerbate their distress (Meichenbaum, 2017). Also, communicative skill training focuses on improving one's ability to communicate effectively. Effective communication is noted to be an important aspect in the management of these challenging behaviours such as anger, stress and aggression. Baby, Gale and Swain (2018) noted that good communication helps the patient become an active partner in the process. Staff training that focuses on communication skills can be useful to both patients and healthcare workers. The combination of these two aspects in the context of secondary school teaching could be quite intriguing. By understanding the triggers, manifestations, and impact of teacher anger, the study will not only enrich the scholarly discourse but also pave the way for practical interventions that can cultivate a more supportive, resilient, and fulfilling educational environment for all stakeholders.

Hypotheses

Two hypotheses were tested at 0.05 level of significance. They are listed hereunder.

1. Post-test mean scores on anger do not significantly differ among participants exposed to stress inoculation training and communicative skill training and control groups.

There is no significant difference in the post-test mean scores on anger as a result of exposing participant to the experimental conditions due to gender

Methodology

This study adopted a quasi-experimental pre-test, post-test and control group design. The quasi-experimental design was considered appropriate for this study because it involves human behaviour where proper randomization of subjects is not feasible. Three groups were used in the study, two treatments and one control group. The target population of the study were all teachers in senior secondary schools in Lagos State. Specifically, participants comprised all identifiable teachers (those who scored between 27-40 in PSS test) with high risk of stress.

The sample 71 (consisting of 29 male and 42 female) teachers in senior secondary schools were drawn from three zones in Educational District II using Simple random and purposive sampling. Simple random sampling was used to select 10 schools in each of the three zones in the District. This made a total of 30 secondary schools. The Perceived Stress Scale was administered on all the teachers in the schools to purposively select teachers who are going through high stress profile. Teachers that score forty and above in the PSS qualified to participate in the study. Simple random sampling was used to select teachers in each of the zones to the two treatment and one control group.

The distribution of the participants to the treatment and control group is presented in Table 1.

Table 1: Distribution of Participants during Baseline Assessment and Experimental Conditions

Baseline Assessment				Experimental Conditions			
Zones	Gender		Total	Group	Gender		Total
	Male	Female			Male	Female	
A	26	35	61	A (SIT)	10	15	25
B	20	31	51	B (CST)	8	16	24
C	24	26	50	C (COG)	11	11	22
Total	70	92	162	Total	29	42	71

Distribution of participants in Table 1 shows that 162 teachers were involved in the baseline assessment while 71 qualified for the study.

The Clinical Anger Scale (CAS) written by Professor William E. Snell et al in 1995 was adapted to collect information on anger. The CAS had sections A and B. Section A was used to collect background information of the participants. It had information such as gender, teaching experience, name of school, etc. Section B had 21 items with 4 choices

each (which are scored 0,1,2,3. The CAS score is simply the sum of the item scores. Thus, scores on the CAS can range from 0 to 63. A higher score means that the participant has more anger symptoms. The interpretation ranges from 0 to 13 – minimal clinical anger, 14 to 19 - mild clinical anger, 20 to 28 - moderate clinical anger, and 29 to 63 - severe clinical anger. The stability of the CAS was ensured using test-retest reliability. The CAS trial test was done in a school that was not part of the main study. The copies of the CAS were given to the selected teachers twice with two weeks interval. Scores derived from the process were computed using Pearson Product Moment Correlation Coefficient. The correlation coefficient of 0.88 was derived and was found suitable for the main study.

The data collection was carried out in three phases, namely: Phase 1 (Pre-treatment Assessment), Phase 2 (Treatment) and Phase 3 (Post-Treatment Assessment)

Phase 1 (Pre-Treatment Assessment): The researcher administered the assessment instruments to all the participants in the first week to identify teachers who are stressed. The PSS and CAS were used and teachers who scored 40 and above in the PSS and above 28 in CAS were considered eligible to be admitted into the study. This was done in the three locations. Two of the locations were randomly assigned to treatment groups of SIT and CST. The remaining one was used as a control group.

Phase 2 (Treatment): The study had two treatment groups and one control group. Group A, SIT had 25 participants, Group B, CST had 24 participants and Group C had 22 participants who met the criteria. Group A was exposed to Stress Inoculation Training Group two will be exposed to communication skills training while group three will be the control group. Treatment will last for six weeks of one and half hours per week.

Experimental Group One (Stress Inoculation Training): Total number of weekly sessions will be eight and each session will last between one and two hours. The outlines of the sessions will be as follows:

- 1st session: Conceptualization and description of stress, its signs and effects and explanation of the role of SIT in stress management.
- 2nd Session: Relaxation education
- 3rd Session: Familiarization with cognitive concepts and association of thoughts and feelings and behaviours.
- 4th Session: Challenging stressful thoughts and negative thoughts test.
- 5th Session: Self-Talk education and the role of negative self talk in causing stress.
- 6th Session: Education on Concentration and distraction techniques.
- 7th Session: Problem-Solving education

8th Session: Practicing the skills learnt in the previous sessions through role playing and the necessity of their application when exposed to stressful situations.

Experimental Group 2: (Communication Skill Training): Total number of weekly sessions will be eight and each session will last between one and two hours. The outlines of the sessions will be as follows.

- 1st Session: Here, we will do the baseline test in order to know the participants.
- 2nd session: We do introduction of the goal and purpose for the research and the introduction of communication skills training.
- 3rd session: We look at the different elements of communication and communication skills
- 4th session: We look at strategies which include non verbal, visual and verbal-communication.
- 5th Session: Here, the participants will be exposed to knowing how to relate with others, putting themselves in the position of other.
- 6th session: They will be exposed to the different communication modes styles.
- 7th session: We look at barriers to effective communication.
- 8th session: We do the post test treatment to find out the effect of the training.

Control Group: The participants in this group received baseline assessment after which they were left without treatment.

Phase 3 (Post-Treatment Assessment): At the end of the treatment, the subsequent week was used to administer the post-test. The CAS was used to administer the post-test in each of the three groups. The administered copies of CAS were collected from the participants and collated for analysis.

Data collected were analyzed using descriptive and inferential statistics. Descriptive statistics used were mean, standard deviation and mean difference while inferential statistics used were the Analysis of Covariance (ANCOVA). The hypotheses were tested at 0.05 level of significance.

Results

Hypothesis 1: Post-test mean scores of anger do not significantly differ among participants exposed to stress inoculation training and communicative skill training and control groups.

Table 2: Descriptive Result on Anger

Experimental Group	N	Pre-test Score		Posttest Score		Mean Difference
		Mean	Std. Dev.	Mean	Std. Dev.	
SIT	25	17.04	2.95	11.44	3.19	-5.60
CST	24	18.13	2.71	12.79	3.81	-5.33
COG	22	18.00	3.53	18.73	3.12	0.73
Total	71	17.70	3.06	14.15	4.58	-3.55

Descriptive Analysis from Table 2 shows that the pre-test mean scores of anger for SIT, CSK and COG were 17.04, 18.13 and 18 respectively. At post-test, the mean score reduced to 11.44 for SIT and 12.79 but increase to 18.73 for COG. The SIT (-5.6) had a better reduction than CST (-5.33). Further computation was done using the Analysis of Covariance to determine the significance of the mean difference. The result of the computation is presented in Table 3.

Table 3: ANCOVA Result on Anger

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	689.806	3	229.935	19.713	.000
Intercept	367.319	1	367.319	31.492	.000
Covariate	.992	1	.992	.085	.772
Group	678.478	2	339.239	29.084	.000
Error	781.490	67	11.664		
Total	15697.000	71			
Corrected Total	1471.296	70			

The result of the ANCOVA presented in Table 3 shows 29.08 as F-calculated value for the difference in the mean score of participants in the respective groups. The value was observed to be greater than the critical value of 3.13 given 2 and 67 degree of freedom at 0.05 level of significance. Consequently, the null hypothesis was rejected and it was concluded that there is significant difference in the post-test mean scores on anger among participants exposed to SIT, CST and COG. This led to the computation of multiple comparisons to determine the pair that was significant. The result is presented in Table 4.

Table 4: Multiple Comparison of Anger based on Experimental Groups

(I) Experimental Group	(J) Experimental Group	Mean Difference (I-J)	Sig. ^b
SIT	CST	-1.309	.189
	COG	-7.249*	.000
CST	SIT	1.309	.189
	COG	-5.941*	.000
COG	SIT	7.249*	.000
	CST	5.941*	.000

Based on estimated marginal means

*. The mean difference is significant at the .05 level. b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Figures in Table 4 show a significant difference between the pair of SIT and COG ($t = -7.249$; $p < 0.05$) as well as CST and COG ($t = -5.941$; $p < 0.05$).

Hypothesis 5: There is no significant difference in the post-test mean scores on anger as a result of exposing participant to the experimental conditions due to gender.

Table 5: Descriptive Result on Anger and Gender

Experimental Group	Gender	N	Pre-test Score		Posttest Score		Mean Difference
			Mean	Std. Dev.	Mean	Std. Dev.	
SIT	Male	10	15.70	2.79	10.20	3.12	-5.50
	Female	15	17.93	2.79	12.27	3.06	-5.67
	Total	25	17.04	2.95	11.44	3.19	-5.60
CST	Male	8	17.13	3.18	12.75	3.62	-4.38
	Female	16	18.63	2.39	12.81	4.02	-5.81
	Total	24	18.13	2.71	12.79	3.81	-5.33
COG	Male	11	19.27	3.50	19.27	3.47	0.00
	Female	11	16.73	3.23	18.18	2.79	1.45
	Total	22	18.00	3.53	18.73	3.12	0.73
Total	Male	29	17.45	3.44	14.34	5.20	-3.10
	Female	42	17.88	2.80	14.02	4.16	-3.86
	Total	71	17.70	3.06	14.15	4.58	-3.55

The description on Table 5 shows that at pre-test, the male mean scores on anger were 15.7, 17.13 and 19.27 for SIT, CST and COG respectively. Their female counterparts had 17.93 for SIT, 18.63 for CST and 16.73 for CG. At post-test, the male mean score on Anger reduced to 10.2 for SIT, 12.75 for CST and unchanged for COG. Their female had post-test mean score of 12.27 for SIT, 12.81 for CST and 18.18 for COG. This shows that male participants in SIT (-5.5) and female in CST (-5.81) had better reduction in anger. ANCOVA was computed to determine the significance of the mean differences, the result is presented in Table 6.

Table 6: ANCOVA Result on Anger and Gender

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	721.601	6	120.267	10.267	.000
Intercept	389.496	1	389.496	33.251	.000
Covariate	.595	1	.595	.051	.822
Group	697.466	2	348.733	29.771	.000
Gender	2.154	1	2.154	.184	.670
Group * Gender	29.318	2	14.659	1.251	.293
Error	749.694	64	11.714		
Total	15697.000	71			
Corrected Total	1471.296	70			

Figures from Table 6 shows that a F-calculated value of 1.251 was derived as the gender difference in the post-test mean scores on anger among participants across the treatment and the control groups. The value was observed to be less than the critical value of 3.15 given 2 and 64 degrees of freedom at 0.05 level of significance. As a result the null hypothesis was upheld. It was concluded that there exist no gender difference in the post-test mean scores on anger among participants across the treatment and the control groups.

Discussion of Findings

Research hypothesis 1: Post-test mean scores of anger do not significantly differ among participants exposed to stress inoculation training and communicative skill training and control groups. It was observed that there was a significant difference in anger among exposed to stress inoculation training and communicative skill training and control groups. Similarly, Öz and Aysan (2011) observed a significant decrease in trait anger, anger-in and anger-out levels and significant increase was found in anger control level and communication skills after the Anger Management Training. Anger management was observed to improve teachers' performance (Rozi, et al., 2022) Also, SIT was observed to help distressed individuals become aware of how they can engage in behaviors that maintain and exacerbate their distress (Meichenbaum, 2017). Sedrpoushan, Navabijeja, Shafiabady and Iravani (2012) reported that emotional focused therapy and stress inoculation training influence the decrease in the subjects' total index-of-anger, anger control-in, control-out, state-anger, state-verbal-anger.

Research hypothesis two: There exists no gender difference in the post-test mean scores on anger among participants across the treatment and the control groups. The study observed that male and female teachers experienced anger in similar manner. Conversely, Yusuf (2017) during the use of Anger Control Model Training reported that gender has an influence in reducing anger and aggressive behaviour among middle school students.

Conclusion

It was noted that anger differs due to the exposure of teachers to stress inoculation training and communicative skill training. Both stress inoculation training and communicative skill training were found potent in controlling anger in teacher's face because of stress encountered at work, and control groups. Though, the former proved to be marginally better. In addition, male and female teachers displayed similar traits of anger emanating from stress.

Recommendations

It was recommended that teachers in Education District II should be given exposed to regular training on stress inoculation training and communicative skill training to mitigate the effect of stress encountered at work. Both male and female teachers should be given similar treatment and privileges such as leave, allowances and other benefits that could be relieve stress.

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