

THE MEDIATING IMPACT OF PERSONALITY AND SOCIO-ECONOMIC STATUS IN THE TREATMENT OF STRESS IN ADOLESCENTS

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Abstract

This was a quasi-experimental study designed to examine the impact of personality and socio-economic status as moderator variables in stress reduction among 90 diploma students of the Institute of Education, Delta State University, Abraka. The paper employed 3x2x2 pretest posttest control group design. Two therapeutic methods Rational Emotive Behaviour Therapy (REBT) and Recreational Exercises Therapy (RET) were used to bring about stress reduction among adolescents. The Analysis of Co-variance (ANCOVA) Statistic was used for data analysis. The results showed that personality had a great impact on stress reduction of adolescents. There was no difference in the impact of personality types A and B. Likewise, the result of socio-economic status revealed a lot of impact on stress reduction among adolescents. Participants from high SES had more impact than those from low SES. These findings have implications for adolescent Counselling in the University system.

Keywords: Mediating Impact, Personality, Socio-economic Status, Adolescents, Stress.

Introduction

The human body constitution has a role to play on how people react to stress. Personality type is an eminent factor, which contributes or influences adolescents' emotion. For example Powell (1983) who worked extensively on understanding human adjustment observed that differences found in the behavioural style of individual is as a result of constitutional factor especially activity level and sensitivity to outside events. McAdams (2006) expressly related Sheldon's numerous constitutional research findings to body types. He concluded that body types determine behavioural traits of an individual. Individual differences affect responses to situations in the environment (Chuah,

Siang Chee, Drasgow, Fritzi, Roberts, Brent (2006). Larsen and Buss (2005) had the submission that objective events happen to people but personality factors determine the impact of those events by influencing peoples' ability to cope. This means that personality has its effects on coping responses. For example, Nauthton (1997) studied subjects who were laid off in large members by AT & T, when the federal deregulation took place and found that people who were categorized as having hardy personalities were mentally and emotionally better than the others.

This study is the continuation of the previous research on efficacy of Recreational Exercises and Rational Emotive Behavioural Therapies for Adolescent Stress Management. The findings revealed a significant difference between the stress reduction of adolescents treated and control. There was significant difference in stress reduction of adolescents treated with Rational Emotive Behavioural Therapy (REBT) and Recreational Exercise Therapy (RET) (Okorodudu, 2006). The point of focus in this research is on the Mediating Impact of Personality and Socio-economic factors in the treatment of Adolescents' stress.

Review of related literature

Personality as a construct has no straight forward meaning. Each personality authority describes it in his own perspective. Alien (2006) and McAdams (2006) defined it as individual differences; behavioural dimensions and traits. The three major concepts were used to describe personality. Individuals are likely to react differently in different situations because of the distinctive thoughts, emotions and behaviours that mark the way an individual adapts to this world (Santrock 2006). However, Allport (1937), Hurlock (1972), Larsen and Buss (2005), and Okorodudu (1999) described it as the dynamic organization within the individual of those psychophysical system that determine his or her unique adjustments to his environment. The dynamic shows that there is the possibility of change occurring in the quality of an adolescents' behaviour. The organization means the relationship and unity that exist among all the traits. Psychophysical systems, according to Allport (1937) are the habits, attitude, values, beliefs, emotional states, sentiments and motives which have physical and psychological basis. All these have major profound influence on adolescents stress. Okorodudu (1999) noted that the composition of the psycho-physical systems in an adolescent determines his reaction to a given life situation or stress. An adolescent

who has unrealistic and irrational set of values, beliefs, poor emotional state and thoughts is already in stress net.

Eysenck (1970) in Cole (1995) and Larsen & Buss (2005) described personality as the more or less stable and enduring organization of person's characteristics, temperament, intellect and physique which determine his unique adjustment to the environment. Adolescents that have stable, enduring and united characteristics are able to device coping strategies in a given situation. On the other hand, adolescents with less enduring traits are quick to perceive an event or situation as stressful. Herbert and Cohen (1994) agreed that stress is a person's perception of environmental events. The perception may include the appraisal of a situation or events as being dreadful, harmful, threatening and challenging (Chen, Langer, Raphaelson, and Mathews, 2004, Naughton, 1997; Okorodudu, 2004). For instance, aggressive children are more likely to draw negative interpretations when faced with a provocation by peers whose intent is ambiguous (Chen et al, 2004). Personal characteristic or traits are commonly referred to as stress-buffering resource because they can protect or buffer people from the pathogenic effects of stress. Cole (1995) also features Cattell's (1950) view of personality as the organization, which permits a prediction of what a person will do in a given situation. Some researches carried out indicated that coping is a complex process, influenced by both personality characteristics and situational demands (Friedman, Nelson, Baer, Smith, & Dworthkin, 1992). Bennett (2006) confirmed that therapists agreed that their own personality has impact on the whole therapeutic process.

Melgosa (1995) analyzed the work carried out by two cardiologists, Meyer Friedman and Ray Roseman, in 1950 which distinguished between personality types A & B. Denga (1994) and Baron (1996) also believed that there are two dichotomous parallel personality types: the type "A" and type "B". These two categories of adolescents exhibit different personality traits. This has far reaching consequences on the adolescents' stress emotions/dispositions and adjustment in and out of school. The type "A" prone adolescents, according to Denga, (1994) are characterized by excessive competitive drive to accomplish more within a limited time. More so, adolescents with type A personality exhibit a chronic sense of time and internal hostility. Baron (1996), Denga, (1994) and Lyness (1993) claimed that type "A" adolescents are easily irritated, time conscious, competitive, hostile, always aggressive, impulsive, fierce, impatient, show social dominance and excess repression. Consequently, the personality

traits may lead to heart attacks, high blood pressure and increased pulse rate which invariably culminates into adolescents' stress and depression.

Similarly, Doctor and Doctor (1994) carried out a research with types A and B personality individuals through face to face interview. It was discovered that type A personality individuals are compulsive, workaholic, aggressive and competitive. Type B individuals are less aggressive; more relaxed and set fewer deadlines differently from traits found in type A individuals. Herbert and Cohen (1994), Melgosa (1995) and Nauhton (1997) observed that type A adolescents exhibit the following behaviours: struggle to do more things in less time, hostile, and aggressive. They also seem to be under the pressure of time, competitive, hasty, and very tense, constant movement; impatience, tense facial expression, roar with laughter, dissatisfied with position; want to move up; and complain frequently. They are often quiet and loud, with fluctuation and emphasis, expressive and gesticulating immediate response; give direct and brief response, hurry the speech of others, and interrupt. On the other hand, type B exhibits tranquil movement, calm, relaxed facial expression, soft smile, satisfied with position, complains, slow and soft, in speech, uniform tone, calm with few gestures, responds after pausing, gives extensive answers, listens attentively and waits to respond. Each of these personality types has "shortcomings".

Type A adolescents are prone to some illness is such as high risk of heart attacks, hypertension, coronary heart disease, gastrointestinal disorders, (e.g. Ulcer, Inflammatory bowel disease) asthma and chronic headaches to mention but a few. Also, aggressive children are more likely to draw negative interpretations (Crick, 1995; Crick & Dodge, 1996; Grotperter & Bigbee, 2002 cited in Chen et al 2004). Type B personality has a health advantage simply because they are able to relax, do not worry about time, are less hostile, less concerned with accomplishment and are content with themselves. Herbert and Cohen, (1994) and Melgosa, (1995) noted that true type B adolescents has less risk of heart attacks but may lack energy to fulfil everyday tasks.

Socio-Economic Factor

One psychological factor that has been related to both lower SES and poorer health is stress (Chen et al 2004). Socio-economic status may enhance reaction and non-reaction of adolescents to stress. Two social class differences determine adolescents' reaction to stress. Socio-economic status is an expression of variations in wealth, power, and

prestige. Wealth, power, prestige and education are indices of socio-economic status. Variation in wealth and prestige determines the class to which an individual belongs in the society.

Socio-economic status is compartmentalized into three dimensions: High, Middle and Low. Apparently, the level of socio-economic background affects adolescents' interest in school activities. Parents' income, occupation and social status assures the adolescent his basic needs. The group of adolescents from high social-economic background may be less stressed, more relaxed and are sure of their basic needs. For instance, children from varying SES backgrounds differ not only in terms of exposure to negative life events but also in how they interpret life situations (Chen *et al.*, 2004). The interpretation of situations and stimuli in their environment as threatening leads to poor health. However, adolescents from a low socio-economic background are not sure of their schooling and their basic needs and so may be tensed and stressed. Gronlund, Renck, Weibull (2005) have the submission that adolescents from low socio-economic background experience all kinds of stress. The upper and middle class parents have high positive interest in education. However, their children develop similar interest in school and in the school work. The low socio-economic status children are associated with poor interest in school activities. Their activities are often anti-school such as absenteeism, truancy, going against school rules and regulations, sexual violation, drug abuse, indiscipline, poor academic achievement, rioting, protesting in every slight and minor school problems, etc. (Olumor, 2002; Woolfolk, 1993; and Slavin, 1991). Slavin (1991) and Buadi (2000) noted that the school was supposed to inculcate in the children good sense of self direction, responsibility, positive self-esteem and self concept, respect for any constituted authorities and respect for person (dignity of persons). Once an adolescent deviates from these virtues, he or she becomes very unruly and wild and ready to champion crisis and problems in any school system. Hence, the study seeks to examine the effects of socio-economic and personality moderator factor in stress reduction among adolescents.

Two therapeutic techniques; Recreational exercises and rational emotive behavioural techniques were used to bring about the required amount of change in the independent variable of stress among the adolescents in the university. The RET has a lot to do with involvement of individual in physical exercise. REBT entails reconstruction of belief pattern of people from negative to positive.

Rational Emotive Behaviour Therapy (REBT)

REBT entails reconstruction of belief pattern of people from negative to positive. According to Kring, Davison, Gerald, Neale and Johnson (2007), the aim of REBT is to eliminate self-defeating beliefs that are unrealistic and irrational. REBT which was originated by Albert Ellis involves assisting people to think positively instead of negatively. One good strategy one can use when trying to reduce stress is positive thought. Replacing negative thoughts, ideas and beliefs with positive ones (Santrock, 2006) is the sole responsibility of the therapist. REBT focuses on how to modify and change irrational beliefs of individuals to more rational ones (Froggatt 2001). According to Coiey (1991) REBT has to do with cognition, behaviour and action for example thinking, judging, deciding, analyzing and doing. REBT is a general school of psychotherapy aimed at providing clients with the tools to restructure their irrational behaviours. According to Ellis (1989) adolescents stress emotion is said to have stemmed from their beliefs, evaluation, interpretation and reactions to life situations. He observed that clients (adolescents) are assisted to learn skills that give them the ability to identify and dispute irrational beliefs that have been acquired and maintained by self indoctrination. It also helps to replace the ineffective ways of thinking with rational and effective cognitions. The technique allows clients not only to apply these skills acquired in solving their current problem but also those problems they are likely to encounter in future. REBT is therefore recommended as one of the therapeutic tools for stress reduction among the adolescents in the university system (Corey, 1991).

Recreational Exercise Therapy (RET)

In this study RET was the second therapy through which stress reduction of adolescents was achieved. Maisamari 1996; Okorodudu, 2004; Okorodudu 2006 claimed that recreation could be an effective method of reducing adolescent stress. Maisamari (1996) confirmed that minor and regular physical activities are one of the most effective techniques for stress reduction among adolescents in the university. Odebunmi (1990) noted that previous research findings on anxiety have shown that it is absolutely difficult for an individual to be anxious if his muscles are relaxed. He further noted that there will be improvement in the adolescents' bodily functions, while experiencing relaxation. Doctor and Doctor (1994) supported the opinion that recreational exercise reduces

stress responses. They agreed with some researchers such as Brown and Prout (1992); Janowiak and Hackman (1994); Vitale (1973) who posited that recreational exercise has tremendous effect on stress reduction among the adolescents. These include biochemical changes in bodily levels of various hormones and fatty acids; post-exercise muscle fatigue and subjective feelings of relaxation and general improvement in heart respiratory and metabolic functions. A research carried out at Duke University Medical Center in the United States on "Exercise can reduce depression". This was reported by the Harvard Mental Health Letter in Awake 2002. The study investigated the superiority and effectiveness of the physical exercise treatment over a standard drug treatment for depression. It was revealed that participants involved in physical exercise therapy were better in shape emotionally and physically. Similarly, another research was carried out on the efficacy of Recreational exercise on adolescents stress reduction. It was revealed that Recreational exercise therapy was very effective (Okorodudu 2004; 2006).

Purpose of the study

This study is designed to achieve two main objectives: Firstly, it examines the possible mediating impact of personality traits in the process of adolescents' stress reduction using two therapeutic procedures of rational emotive behaviour therapy and recreational exercise therapy. Secondly, it looked at the mediating impact of socioeconomic status in the treatment of adolescents' stress under the psychotherapeutic procedures.

Method

Research Design

This study adopted a 3x2x2 factorial pre-test-post-test experimental control group design. Participants (Pers. types A & B; SES high and low) were unequally matched and assigned into two treatment groups and control. It was inequitable distribution because the manipulation has been done before the study took place. The participants were pre-tested before treatment to obtain those with stress traits. They were also post-tested after the treatments to obtain the effects of personality and socio-economic variables on stress reduction of university adolescents. (Okorodudu 2004; Okorodudu 2006; Gronlund, Renck & Weibull 2005; Aremu 2006).

Participants

Ninety diploma year one students were drawn from a population estimate of 150 respondents who showed enough evidence of stress in the Institute of Education, Delta State University, Abraka, Nigeria. The age ranges of the participants were 17 and 18. They were just in their 100 level. The students have some problems to contend with, such as adjustment to the new school environment, strenuous screening and registration exercise, inadequate learning materials to mention a few. All these may account for adolescents stress. These invariably bring about adolescents misconduct and manifestation of behaviour problems.

A simple random sampling technique was adopted. The procedure involved matching and assignment of participants to experimental and control groups. This procedure could not ensure equitable distribution of participants according to socioeconomic status and personality types. However, the participants were assigned to three groups through careful examination periods for general courses stipulated on the time table. On the whole ninety participants were drawn into the study. Out of the 90 participants in the study 64 (71.1%) were type A personality; 26 (28.9%) type B; and 37 (41.1%) high SES and 53 (58.9%) low SES. An instrument which measured personality types A and B of adolescents as well as socioeconomic status were administered to the participants. These instruments were scored and interpreted and the results were used to identify the categories of the participants.

Instrumentation/Measures

The instrument used for measuring and selection of the participants before and after the treatment is "Adolescent Stress Inventory (ASI) adapted from Odebunmi (1989). The validity of the instrument was established using factor analytic method. About 33 items were generated. On the whole twenty-two items were retained in the instrument. The selection process involved choosing items having rotated factor matrix between .50 and above. The items having rotated factor matrix below .50 were eliminated (Tumage & Spielberger 1991, Vagg & Spielberger, 1998; Okorodudu, 2006). The construct validity of adolescent stress inventory was enhanced by computing the internal consistency of all the test items. The Cronbach's alpha obtained was .61 ($P < 0.05$). The section C consisted of 10 personality items. The construct validity of the items was established using factor analytic method and Cronbach's alpha was used to estimate

the internal consistency of the personality items. This yielded 10 personality items with Cronbach's alpha index of .59($P < .05$).

The socio-economic status unlike the stress items and personality items was solely included in the Bio-data of the participants; as (A) Academic Qualification of Father, (B) Academic Qualification of Mother, (C) Father's Occupation, and (D) Mother's Occupation. In the scoring of the socio-economic status of the participants some measures were used. Participants whose parents did not go to school; parents who obtained primary six leaving certificate; parents who obtained WAEC were in category one of Academic Qualification belong to low SES, while participants whose parents obtained certificates/degrees from any tertiary institution were classified as High SES. Participants whose parents are in occupations such as: traditional farming; petty trading; weaving; dying; clerical officers; cleaners; messenger; and the likes were also category as low SES while participants whose parents are in occupations such as Judiciary, lecturing, doctors, counsellors; politicians, engineering and the likes were categorized as High SES (Okorodudu and Omoni, 2001). Based on this scoring, the participants from Low Socio-economic background were 53, while those from high socio-economic background were 37. The reliability of the instrument was established using Cronbach's alpha statistic. Stress items yielded .62; $P < .05$ while Personality items .59; $P < .05$.

Procedure

The data collection for the study took fourteen weeks. The pre-test was administered the first week to identify students with stress traits, personality types; and socio-economic differences. The participants were exposed to the two main interventions (REBT & RET) for 5 weeks respectively. The first five weeks was devoted to Rational Emotive Behavioural Therapy. The participants were exposed to REBT in order to reconstruct faulty thinking pattern and irrational beliefs. The trainings were as follows:

Session I: The therapist and assistant therapists helped the participants in the establishment of rapport. This was done through lecture on general introduction, orientation and essence of the counselling intervention.

Session II: Participants were exposed to lecture on stress.

Session III: Here participants were introduced to the treatment package (REBT).

Session IV: Participants were exposed to how to identify, debate, dispute and disbelieve irrational ideas/statements.

Session V: Participants were assisted by the therapist and research assistants in the discussing and role-playing of skills learned. Participants were made to identify (10) ten irrational beliefs/statements. Example:

- (a) I am good for nothing
- (b) I will never succeed in life
- (c) I cannot get male friend because I am ugly.
- (d) Nobody loves me
- (e) I cannot pass my examinations.

The above irrational statements and the likes were identified debated, disputed, and disbelieved at the treatment venue.

The essence of the exposure to REBT was to assist participants reconstruct their irrational and faulty statements in and out of the treatment venue. Participants were therefore encouraged to apply the skills learnt on the daily self examination which will lead to stress reduction among adolescents.

Content of Recreational Exercises Therapy

The treatment package exposed the subjects to recreational activities for muscle relaxation. The objective of this technique is to achieve stress reduction among adolescents in the university.

Treatment Package

Session I: Establishment of Rapport

Session II: Participants were introduced to the concept of stress.

Session III: Participants were exposed to Recreational exercises e.g. deep breathing, listening to good and interesting music popular to adolescents, singing and dancing; watching of interesting pictures and catalogue.

Session IV: Participants were taken to site III of Delta State University, Abraka for sightseeing and relaxation.

Session V: Role play of all the skills learned and adopted for relaxation.

Results.

The statistics employed for the study were analysis of covariance (ANCOVA) and Multiple Classification Analysis (MCA). The ANCOVA was used to determine the mediating impact of personality types A and

B and socio-economic status in the stress management of adolescents. Multiple Classification Analysis (MCA) was employed to explain the difference in the mediating impact of personality types A and B and high and low socio-economic status on the adolescents stress reduction.

Table 1: Analysis of Covariance (ANCOVA) of Posttest Scores of personality types A and B adolescents as function of treatment.

Sources of Variable	SS	Df	MS	F
Prestress (Covariate)	217.411	1	217.411	4.808
Main Effects	2052.884	3	684.294	15.132*
Treatment	2022/112	2	1011.056	22.857
Personality types	.704	1	.704	.016
2 way Interactions	43.118	2	21.559	.477
Treatment personality Types A and B				
Explained	2313.515	6	385.569	8.526
Residual	3753.475	83	45.223	

P<05 level of significant. * Significant.

As shown in Table 1, the ANCOVA statistical analysis of the Post-test Scores of personality types 'A' and 'B' adolescents treated and control with their pre-test scores as covariates produced an F-ratio of 15.132 df = 3/83, which was significant at .05 level of confidence. Therefore, the null hypothesis which states that there would be no significant impact between the stress reduction of personality types A and B adolescents treated and control was rejected.

The conclusion was reached that there is a significant difference in stress reduction of adolescents having personality types 'A' and 'B'; treated and control. Further analysis revealed that there is no 2-way interaction as shown by the F-ratio of .477 which is less than the table value of .623. It was found not significant at .05 level of confidence. The non-significant interaction would suggest that physical recreational exercises and rational emotive behavioural therapeutic effects are independent of each other, for the personality types 'A and B'. It equally suggests that the effects of stress reduction treatments were the same for personality types A and B adolescents involved in the study.

Table 2: Multiple Classification Analysis (MCA) of Pretest - Posttest Treatment Comparison by Personality Types A and B of Adolescents Grand Mean =57.11

Variable + Category	N	Unadjusted Deviation	Eta	Adjusted Independents + Covariate Deviation	Beta
RECT	30	1.82	.71	7.72	.60
REBT	30	5.02		4.98	
Control	30	-6.84		-6.71	
Personality					
1. Type A	64	-24	.05	-.06	.01
2. Type B	26	.58		.14	

Multiple r = .612 Multiple r² = .374

Table 2, shows the comparison of the Pretest - Posttest treatment of the impact of personality types A and B in a Multiple Classification Analysis (MCA).

The table revealed the adjusted independent variables plus covariate deviation value for type A personality as -.06 while B personality as .14. This suggests that type B adolescents benefited more from the treatment techniques but the difference was not statistically significant as shown earlier. For instance, the Beta value of .01 was an indication of a very low degree of association between the effects of treatment and personality types A and B adolescents. These values are very low indicating that the treatments of recreational exercises and rational emotive behavioural therapy (REBT) on personality types A and B adolescents involved in the study had no significant main effect.

Table 3: Analysis of Covariance (ANCOVA) of Post-test Scores of Adolescents from High and Low Socio-economic status as a function of treatment (REBT AND RECT) Control with Pretest Scores.

Sources of Variation	SS	df	MS	F
Pretest	217.411	1	217.411	4.906
Covariate				
Main effects	2096.534	3	698.845	15.769*
Treatment	2089.944	2	1044.972	23.579*
SES	44.353	1	44.353	1.001
2-way interactions	74.486	2	37.243	.840*
Treatment SES				
Explained	2388.431	6	398.072	8.982
Residual	3678.458	83	44.319	

P<05 level of Significance * Significant

As shown in Table 3, the ANCOVA Statistical analysis of the Post-test scores of adolescent from high and low socio-economic status (SES) treated and control with pre-test scores as covariate revealed an F-ratio of 15.764, $df = 3/83$, which was found to be significant at .05 level of confidence. Therefore, the null hypothesis which states that there would be no significant difference in the impact of treatments on stress reduction of adolescents from high and low socio-economic status (SES) treated and control was rejected. The conclusion was drawn that there is a significant in stress reduction of adolescents from high and low socio-economic. However, further analysis revealed that there was a 2-way interaction as a result of treatment effect that is dependent on the concomitant influence of two independent variables. The conclusion can be drawn that the effects of recreational exercise therapy and rational emotive behavioural therapy were not the same for high and low socio-economic adolescents treated.

Table 4: Multiple Classification Analysis (MCA) of Pretest-Posttest Treatment Comparison by Socio-Economic Status of Adolescents.

Variable + Category	N	Unadjusted Deviation	Eta	Adjusted Independents + Covariate Deviation	Beta
RECT	30	1.81		1.61	
REBT	30	5.02	.61	5.15	.61
Control	30	-6.84		-6.74	
SES					
High	37	.11	.01	.86	.09
Low	53	-.07		-.60	

The results of MCA of the impact high and low socio-economic status in adolescents stress reduction was significant. As revealed in Table 4, the adjusted independent variables plus covariate deviation values for high and low SES is .86 and -.60 respectively. The beta value is .09. This beta value is an indication that some degree of association exists between the impact of treatment techniques and socio-economic status variable of adolescents treated. This discrepancy in the values is an indication that the recreational exercises and rational emotive behavioural techniques had greater influence on the stress reduction of adolescents from high socio-economic status. The difference was found to be significant, which suggests that the adolescents from the low socio-economic status did not benefit equally with those from high socio-economic status involved in the study.

Discussion

On the whole, the results confirmed that the treatments had significance impact on stress reduction. The variables of Personality types A & B and high and low socio-economic status were potential moderators in the stress reduction of adolescents. The findings from hypothesis one in the study revealed that personality is related to stress and has great impact on the stress reduction of the adolescents. The study did not reveal any significant difference in the impact of the treatments on the personality types A and B adolescents in their stress reduction. Hence, in the treatment of adolescents stress, personality of an individual should be

given serious attention without considering whether an individual is type A or B.

This finding corroborates the works of several authors. Powell (1983) who observed that differences found in the behavioural style of individual were as result of constitutional factor especially responses to outside events. McAdams (2006) agreed that body types determine behavioural traits of an individual. Santrock (2006) stated that individual's different reaction is as a result of behavioural factors that mark the adjustment pattern to his world. Allport (1937); Hurlock (1972); Larsen & Buss (2005); and Okorodudu (1999) confirmed that psychophysical system determines individual's unique adjustments to his environment. Geen (2006) in his study observed that therapists personality have impact on the whole therapeutic process. Authorities such as Chen et al (2004); Cole (1995); Denga (1994); Baron (1996); Herbert and Cohen (1994); and Melgosa (1995); to mention a few, support the findings of this study. Secondly, the analysis of data on hypothesis two revealed that SES had impact on stress reduction of adolescents. However, the observed variation between participants from high and low socio-economic status may be due to some factors, such as the living conditions of the adolescents' parents and family support. Participants from high socio-economic status benefited more from the treatments than those from low. The variation in the impact may be due to the support such category of adolescents from high socioeconomic status get from their families. The finding is in line with the works of Buadi (2000) Woolfolk (1993); Olumor (2002); Gronlund et al (2005) and Slavin (1991). However, the observed variation between SES high and low supports the findings of Ngai and Cheung (2000). They claimed that adolescents' parental living conditions and family support may enhance or hinder adolescents' stress reduction.

In conclusion, personality and socio- economic factors contributed in no small measure to the reduction of stress among adolescents. The study has counselling implications. For instance, school counsellors should encourage adolescents in developing pleasant personality. Also school counsellors can encourage adolescents from low socio- economic status on how to embark on self help projects during the vacations. This can go a long way in meeting their stress reduction treatment.

References

- Alien, B. P. (2006). *Personality, Theories, Development Growth and Diversity (5th)* Boston, Allyn and Bacon.
- Allport, G. W. (1937). *Personality: A Psychological Interpretation*. New York: Henry Holt.
- Archer, J. Jr and McCarthy, J. C. (2007) *Theories of Counselling and Psychotherapy, Contemporary Application*. New Jersey; Pearson Education Inc.
- Aremu, A. O. (2006). The Effect of two Psychological Intervention Programmes on the Improvement of Interpersonal Relationships of Police officers in Osogbo, Nigeria. *Criminal Justice Studies*, 19(2), 139 - 152.
- Baron, R. A. (1996). *Essential of Psychology*. Boston Allyn and Bacon.
- Brown, T. D. & Prout, H. T. (1992). *Counselling and Psychotherapy with Children and Adolescents Theory and Practice for School and Clinic Setting (2nd Ed.)*. Boston: Clinical Psychology Publishing Co. Inc.
- Buadi, J. Y. (2000). School and Personality Correlates of Students' Attitudes to the School Evidence Services in Secondary Schools in Delta State. Unpublished Ph.D. thesis, Delta State University, Abraka.
- Cole, G. A. (1998). *Organisational Behaviour*. Great Britain: Ashford Colour Press, Gosport, Hants.
- Corey, G. (1991). *Therapy and Practice of Counselling and Psychotherapy*. Belmont, CA: Wadsworth Inc.
- Chuah, S. C., Dras, S., Fritz, R., Brent, W. (2006). Personality Assessment: Does the medium matters? *Journal of Research in Personality* 40 (4),359-376.
- Denga, D. I. and Ekpo, T. N. (1994). *Executive Stress: It Rape and Management*. Calabar: Rapid Educational Publishers Ltd.
- Doctor, R. M. and Doctor, J. N. (1994). Stress in M. V. S. Ramachaurdrans (Ed.), *Encyclopaedia of Human Behaviour* 4:311 - 323.
- Ellis A. (1989). How to stubbornly refuse to make yourself miserable about anything Yes about anything In C. Gerald (Ed.), *Theory and Practice of Counselling and Psychotherapy*: 334 - 365 California: American Board of Professional Psychology.
- Friedman, I. C., Nelson, P. V., Baer, P. E., Smith, F. E. & Dworhkin, R. J. (1992). The Relationship of Dispositional Optimism, daily life stress and domestic environment of coping methods used by cancer patients. *Journal of Behavioural Medicine* 15:127-141.

- Froggatt, W. (2001). A Brief Introduction to Rational Emotive Behaviour Therapy. Available online: www.rational.org.nz
- Geen, L. B. (2006). The value of Hate in the Counter transference. *Clinical Social Work Journal*, 34(2), 189 - 199.
- Gronlund, E., Renck, B., Weibull, J. (2005). Dance/Movement Therapy as an Alternative Treatment for Young Boys Diagnosed as ADHD: A Pilot study. *American Journal of Dance Therapy (AJDTD4)*: 27(2) 63 - 85.
- Harvard Mental Health Letter (2002). "Exercise can Reduce Depression". *Awake*, January, 8.
- Herbert, T. B. and Coben, S. (1994). Stress and Illness. In V.S. Romachandrans (Ed.), *Encyclopaedia of Human Behaviour*. 4(r - z) Pp. 325 - 332.
- Hurlock, E. (1972). *Child Development*. London: McGraw - Hill International Book Company.
- Janowiak, J. J. and Hackman, G. (1994). Meditation and College Students' self- actualization and rated stress. *Psychological Reports*, 75, 1007 - 10.
- Kring, M. A; Gerald, C. N., John, M. J., Johnson, S. L. (2007). *Abnormal Psychology* (10th Edition) New Jersey: Publisher
- Larsen, R. J. & Buss, D. M. (2005). *Personality Psychology Domains of Knowledge about Human Nature* 2nd (Ed.) New York: McGraw Hill.
- Lyness, S. A. (1993). *Predictor of Differences between Type A and B* *Psychological Bulletin*. 114:266-295.
- Maisamari, J. Y. (1996). Some stress Management Techniques Implications for Counselling. *The Counsellor*, 14(1), 41 -46.
- McAdams, D., P. (2006). *The Person: A New Introduction to Personality Psychology (4th)*. John Wiley & Son Inc.
- Melgosa, J. M. (1995). *Less Stress*. Madrid (Spain) Editorial Safeliz.
- Naughton, Fumi, O. (1997). Is Stress a motivation or emotion. (Unpublished paper).
- Odebunmi, A. (1990). *Understanding Behaviour Problems: An Introduction*. Abeokuta: Abemi Sodipo press Ltd.
- Olumor, C. (2002). Factors Influencing Students choice of career in Ukwuani Local Government Area of Delta State Unpublished project. Delta State University, Abraka.
- Okorodudu, R. I. (1999). Selected Personality Traits and motivational indices as correlates of work attitude of teachers in secondary schools in Delta State. Unpublished Ph.D. Thesis, University of Benin - Benin City.

- Okorodudu, G. N. (2004). The efficacy of recreational exercises rational emotive, behavioural therapies for adolescents stress management unpublished Ph.D Thesis, Delta State University, Abraka.
- Okorodudu, G. N. (2006). Efficacy of Recreational Exercises and Rational Emotive Behavioural Therapies for Adolescents Stress Management. *Perspectives in Education* . 22 (3), 172-185.
- Okorodudu, G. N. and Omoni, G. E. (2002). Impact of Working Wives on Family Orientation and National Development: Implications for Counselling. In V. T. Jike (Ed.). *Ethnic Militia and Youth Rebelliousness in Contemporary Nigeria*. Lagos: NISS Publications.
- Santrock, J. W. (2006). *Human Adjustment* New York, McGraw Hill Inc.
- Slavin, R. E. (1991) *Educational Psychology* New York. West Publishing Company.
- Woolfolk, A. B. (1993). *Educational Psychology* (5th Ed.). Boston: Allyn & Bacon.