

The Effects of Assertiveness Training and Cognitive Restructuring on Low Self-Esteem among University Students in Ghana

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Abstract: Low self-esteem can pose serious threats to the general well-being of individuals and if not checked may lead to the development of mental health problems. The study sought to ascertain the effects of assertiveness training and cognitive restructuring on low self-esteem among technical university students in Ghana. The study employed the quasi-experimental design. The simple random sampling method was used to select 60 participants for the study. Rosenberg's Self-Esteem (RSE) Scales were used for the data collection. The Cronbach's alpha reliability co-efficient for the instrument was 0.77. The statistical tools used for data analysis were one-way analysis of covariance (One-way ANCOVA) and two-way analysis of covariance (two-way ANCOVA). The results showed that participants who were exposed to assertiveness training and cognitive restructuring recorded better scores in the post-test scores as compared to participants in the control group. It was concluded that assertiveness training and cognitive restructuring were effective in enhancing participants' self-esteem levels. It was therefore, recommended that counsellors should employ the two therapies to improve the self-esteem of students.

Keywords: Assertiveness Training, Cognitive Restructuring, Low Self-Esteem, University Students, Quasi-Experimental Study

1. Introduction

The issue of self-esteem has been and continues to be of concern to societies around the globe. It appears that the majority of those battling with the issue of low self-esteem with its related consequences are young people. Self-esteem is the evaluative and affective dimension of the self-concept, and is considered as equivalent to self-regard, self-estimation and self-worth (Harter, 1986). Self-esteem is defined as the evaluation which individuals make and customarily maintains with regard to themselves: it expresses an attitude of approval and indicates the extent to which individuals believe themselves to be capable, significant, successful and worthy Coopersmith (1967). In sum self-esteem is a personal judgement of the worthiness that is expressed in the attitudes individuals hold towards themselves.

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People's self-esteem is generally shaped by all the experiences and interactions they have as they grow through the various stages across the life span. Though individuals may not have any control over the happenings around them, such occurrences contribute immensely to shape their beliefs, thoughts and feelings. There is a well-established relationship between self-esteem and psychological well-being, and there is also a relationship among self-esteem, self-efficacy, ego strength, hardiness, optimism and maladjustment, according to (Bernard et al., 1996; Hajek, 2017; Lin et al, 2004; Ozşaker 2013; Set,2003). Low self-esteem is also related to depression and suicidal tendencies (Adisa-Attah, Ossom, & Lawer, 2016). A healthy self-esteem is believed to be extremely important for good adjustment in society (Sharma & Agarwala, 2015).

Individuals who suffer from low self-esteem usually lack fulfilment in life because the feelings of low self-esteem can lead to attitudes of hopelessness, uselessness and feelings of scantiness. Students with these attitudes find it difficult to build any social relationships which leads to isolation and loneliness (Nordstrom, Goguen & Hiester, 2014). Low self-esteem is not only connected to depression but also an associated feature of a wide range of other clinical conditions, such as learning disorders, stuttering, social phobia, and attention deficit/hyperactivity disorder (American Psychiatric Association 2000). In a study among predominantly Caucasian adolescents, Overholser, Adams, Lehnert and Brinkman (1995) found that low self-esteem was closely related to feelings of depression, hopelessness, and suicidal tendencies. They therefore proposed that assessment of adolescents should include an evaluation of self-esteem.

Anecdotal evidence from Counselling units of Cape Coast Technical University and Takoradi Technical University in Ghana covering the period 2008 to 2018 indicated that a number of technical university students battle with the issue of low self-esteem. Sorensen (2003) believes that low self-esteem always forms in childhood, when an individual is developing his initial view of himself or herself and his or her attributes and once formed, low self-esteem cannot be overcome without going through a recovery process. Studies have indicated that people's self-esteem can be improved through intervention (Makinde & Akinteye, 2014) Assertiveness training and cognitive restructuring have been used in a number of intervention studies that aimed at improving self-esteem (Anyaneme, Chiyelu, & Nneka, 2016; Makinde & Akinteye, 2014; Ozşaker, 2013; Tannous, 2015) and have proven to be effective. It is against this background that the researchers sought to explore the effectiveness of assertiveness training and cognitive restructuring on low self-esteem among students of technical universities in southern Ghana.

2. Purpose of the Study

The purpose of the study was to:

1. determine the effects of assertiveness training and cognitive restructuring techniques on low self-esteem; and
2. ascertain whether there is a difference between male and female students in the effect of assertiveness training and cognitive restructuring techniques on low self-esteem.

3. Hypotheses

Two hypotheses were formulated to guide the study.

1. Ho 1: There is no significant effect of a) assertiveness training and b) cognitive restructuring techniques on low self-esteem of technical university students in Southern Ghana.
HA 1: There is a significant effect of a) assertiveness training and b) cognitive restructuring techniques on low self-esteem of technical university students in Southern Ghana.
Ho 2: There is no significant difference in the effect of a) assertiveness training and b) cognitive restructuring techniques on the self-esteem of male and female students in technical universities in Southern Ghana.
HA 2: There is significant effect of a) assertiveness training and b) cognitive restructuring on the depression levels of students in technical universities in Southern Ghana.

4. Literature Review

4.1 Low Self-esteem

Low self-esteem can emanate from different sources and may manifest in diverse ways. Venzin (2014) is of the opinion that any negative life event or reaction can cause us to doubt ourselves. We all have times when things do not go as we think they should. The world can feel lonely in trying to find the right resources to help us at these times; everything can be daunting and even confusing. Often, we place too much credibility on the negativity we have around us.

Low self-esteem is having a general negative overall opinion of oneself, judging or evaluating oneself negatively, and placing a general negative value on oneself as a person. These deep-seated, basic, negative beliefs about oneself are often taken as facts or truths about who they are as a person (Lim, Saulsman, & Nathan, 2005). Low self-esteem can be part of a current problem, a result of other problems, or a problem in itself and a risk factor for other problems. It can also have a negative impact on a person concerning self-criticism and high distress and a negative impact on the lives of individuals covering work, relationships, recreation time, and self-care. Low self-esteem, in particular, comes from a lack of self-acceptance, and frustrated achievement (Sihera, 2015).

Low self-esteem is not an inherited trait neither is it something that appears suddenly. Rather, it develops over weeks, months and years of experiences that cause both children and adults to lose confidence. It is frequently traced to abusive or dysfunctional early years, the effects of which can persist well into adulthood (Rowan, 2014). Rowan reiterates that positive experiences and relationships can raise a person's confidence and allow them to live a happy, successful life. On the contrary, negative experiences and relationships wound many people deeply and cause them to lose hope in themselves and their future (Rowan, 2014). This seems to suggest that self-esteem is formed and maintained through all the experiences and interactions we have as we grow through the various stages across the life span, be it positive or negative.

Low self-esteem is a debilitating condition that keeps individuals from realizing their full potential (Nair, 2016). The feelings of low self-esteem may lead to attitudes of hopelessness, uselessness and feelings of scantiness and these attitudes make it difficult for such individuals to build any social relationships and this leads to isolation and loneliness (Nordstrom, Goguen & Hiester, 2014). Studies have demonstrated that low self-esteem is a risk factor for developing mental health problems (Mulligan, 2011).

Low self-esteem correlates with irrationality, blindness to reality, rigidity, fear of the new and unfamiliar, low self-worth, lack of self-confidence, social anxiety, depression, feelings of inadequacy, inappropriate conformity or inappropriate rebelliousness, defensiveness, an overly compliant or controlling behaviour and fear of or hostility towards others (Lim et al., 2005). Low self-esteem people might expect that things would not turn out well for them and might often feel sad, depressed, anxious, guilty, ashamed, frustrated, and angry, having difficulty speaking up for themselves and their needs. They are likely to avoid challenges and opportunities, or be overly aggressive in their interactions with others (Lim et al., 2005). Those with low self-esteem are described as people who have difficulty in interacting with others socially as they feel shy, awkward and conspicuous and are more likely to experience social anxiety and alcohol and other drugs use (McLeod, 2012). In the Ghanaian context, low self-esteem has been associated with some social maladaptive behaviours such as armed robbery and suicide/suicide ideations (Baafi as cited in Quarcoo, 2013).

4.2 Assertiveness Training and Cognitive Restructuring

Assertiveness training and cognitive restructuring have been used in a number of intervention studies that aimed at improving self-esteem and has proven to be effective. For example, Khayat (2017), Anyamene, Chiyelu & Nneka (2016); Ozşaker (2013), Taylor and Montgomery (2007) and Lin et al. (2004). Assertiveness training programmes are designed to improve an individual's assertive beliefs and behaviours, which can help individuals change how they view themselves and establish self-confidence (Emmanuel, Okreke, & Anayochi, 2015; Shimizu et al., 2004; Warland et al., 2014). Iruloh and Amadi (2008) are of the view that assertiveness training helps to teach an individual on how to assert himself or herself despite the intimidation and pressures coming from other people.

Assertiveness involves standing up for your rights in a manner that does not offend others or deny the rights of others. When people are assertive, they have more control over their life and this makes it less likely for other people to take advantage of them. Assertiveness is a quality of being self-assured and confident without being aggressive (Anyamene, Chinyelu, & Nneka, 2016). It is a way of communicating and behaving with others that helps people to become more confident and develop awareness of themselves. Assertiveness is said to be a learnable skill, and is characterized by a confident declaration of a statement without need of proof, which affirms the person's rights or point of view without aggressively threatening the rights of another (Anyamene et al., 2016).

Unassertive persons are usually said to be people who have social anxiety or depression in their lives (Anyamene et al., 2016). Unassertive behaviours are considered to be obstacles that have a high and positive correlation with fear, worries, social anxieties and various internal aggression according to Noble and McGrath (2005). They are usually unable to do anything about their condition but might eventually burst into a fit of anger at what they find difficult doing and this depicts psychological dysfunction

However, Bandura (1977) is of the view that psychological procedures can also alter an individual's self-esteem and self-efficacy. Through assertiveness training and cognitive restructuring, individuals will gain confidence to act on their situation to bring a change thereby reducing the tension they experience (Anyamene et al., 2016).

Cognitive restructuring, also known as cognitive reframing, is a technique drawn from cognitive therapy that can help people identify, challenge and alter stress-inducing thought patterns and beliefs (Mills, Reiss, & Dombeck, 2008). When Cognitive restructuring is being used to treat low self-esteem, Cognitive behavioural therapy takes the view that people's core beliefs are just opinions that are maintained by unhelpful thinking or behaviours and not facts. Cognitive behavioural therapy focuses on our thinking errors and retrains the brain to think in a more balanced way and it focuses on behaviours to make them more functional (Willson & Branch, 2019; Yeo & Choi, 2011).

Cognitive restructuring for low self-esteem often focuses on identifying negative thoughts about oneself, and identifying distorted thinking, such as labelling oneself as a failure due to one skills deficit or negative event (CBT Los Angeles, n.d.). When a person with low self-esteem enters a difficult situation then negative beliefs about the self are activated which in turn generate negative predictions, about what could go wrong, and also generates anxiety and low mood. When an individual's perception of himself or herself is negative it can lead to an overwhelming feeling of low self-worth; "I'm not good enough"; "not interesting enough"; and/or "I am not attractive enough." The cognitive restructuring technique helps us to test each thought we have for accuracy before conclusion is drawn. Cognitive restructuring enhanced self-esteem which led to the improvement of academic performance. (Antwi & Avonokadzi, 2014; Liza, 2010).

On the basis of gender, studies have indicated that both males and females suffer from low- self-esteem. The difference, however, lies in the source of their low self-esteem and not the degree to which they experience low self-esteem (Anhalt, 2015; Carlson, Uppal & Prosser 2000; DuBois, Burk-Braxton, Swenson Tevendale, & Hardesty, 2002; Wild, Flisher, Bhana, & Lombard (2004)). For instance while men looked to attributes such as, social comparison, physical appearance, ability to initiate relationship with members of the opposite sex, intelligence and independence to fuel their self-image,, women usually rely on reflected appraisals as the source for their self-esteem (Anhalt, 2015; Hollandsworth & Wall, 1977).

4.3 Theoretical Framework

Roger's person-centered theory is the theoretical framework for the study. The theory is of the view that all humans, as well as other living organisms have an innate need to survive, grow and enhance themselves. Rogers (1961) believes that every individual can achieve his or her goals, wishes and desires in life, a situation he refers to as self-actualization. According to Rogers, actualizing tendency is a built-in motivation present in every individual that propels them to develop their potentials to the fullest extent possible and that all creatures strive to make the best of their existence. According to Thorne (as cited in Corey, 2009), Rogers held the deep conviction that "human beings are essentially forward-moving organisms drawn to the fulfilment of their own creative natures and to the pursuit of truth and social responsiveness. In view of this, all biological drives are included under actualizing tendency, because they must be satisfied if the organism is to continue its positive development. The actualizing tendency cause people to become more differentiated, more independent and more socially responsible. Rogers (1980) believes that the individual has within himself or herself vast resources for self-understanding, for altering his or her self-concept, attitudes and self-directed behaviour and that a conducive environment is all that individuals need to facilitate their growth.

Rogers maintains the belief that individual's childhood experience is the main determinant of whether or not an individual will become self-actualized. He asserts that if the individual experiences conditional positive regard from parents, the individual develops his or her parent's values and conditions of worth and this can lead to incongruence between the self and experience of the individual. On the other hand, if the individual experiences unconditional love and does not develop conditions of worth there is congruence between self and experience and such a person becomes stable and can strive towards actualisation (McLeod, 2008).

Rogers believes that to develop a positive sense of self, the individual must grow up in an environment of unconditional love. When there is an inconsistency between exhibited behaviour and sense of self of the individual, anxiety sets in. However, through assertiveness training and cognitive restructuring the individual can be helped to develop a positive sense of the self which will in turn enhance the self-esteem of the individual. Human beings in their healthiest state are active, and are ready to learn, explore and master their environment (Ryan & Deci, 2004).

5. Methodology

5.1 Research Design

The Pre-test - post-test control group quasi-experimental design was used for this study. It was used to establish cause-effect relationship among the variables.

5.2 Population

The target population for the study was all second year Higher National Diploma (HND) students of the technical universities in southern Ghana. The accessible population however, was all second-year students of the technical universities in the coastal regions of Ghana. The second-year students were deemed appropriate because they had been in the universities for at least a year and have gone through a period of struggle or otherwise of some kind of psychosocial adjustments and can respond to self-esteem issues better. The first-year students had just begun the psychosocial adjustment process at the tertiary level of education. The third-year students were too occupied with putting finishing touches to their academic work and would not commit themselves fully to issues that were not strictly academic.

5.3 Sampling Procedure

The researchers used a multistage sampling procedure to arrive at the sample for the study. The researchers, then, used purposive sampling method to select three technical universities in the coastal regions for the study. The technical universities are divided into three schools namely: School of Business and Management Studies, School of Applied Sciences and Arts, and School of Engineering. Simple random (lottery) was used to select one school from each of the three institutions for the study. The class sizes of Level 200 of the various departments within the selected schools were obtained from the various institutions. Two hundred (200) students were then randomly selected from the selected school in each participating institution to take part in the pre-test. The two hundred students were selected in order to have a sample large enough to select the participants who have both characteristics of having low self-esteem and at the same time experience depressive disorders. In all, six hundred (600) students took part

in the pre-test (baseline survey). The multistage sampling steps were employed to sample participants for the baseline survey.

The Purposive sampling technique was used to select three technical universities in the coastal regions of Ghana (CCTU, TTU, ATU) while the simple random sampling specifically the lottery method was used to select one school from each technical university. Finally, the Quota sampling was used to select sample size from the class size 200 students from each school. The scores obtained were used to determine participants who have low self-esteem. These participants were randomly sampled to select sixty (60) participants (20 from each institution). The final sample of 20 participants per group was determined in line with Creswell (2015) who stated that experimental studies should have a minimum of 15 participants. Finally, the three groups (institutions) were randomly assigned to the control group, assertiveness training and cognitive restructuring techniques treatment groups. Table 1 shows the selection of participants for the study.

Table 1: Selection of participants for the study

Institution	School	Population size	Initial sample size	Eligible students	Final sample size
CCTU	Business & Management Studies	560	200	32	20
TTU	Applied Science & Arts	934	200	33	20
ATU	Business & Management Studies	875	200	29	20
Total		2369	600	94	60

5.4 Data Collection Instrument

The Rosenberg Self-Esteem (RSE) Scale was used in the collection of pre-test and post-test data. The RSE Scale is a 10-item self-report measure that pertains to self-worth and self-acceptance on a four-point Likert-type scale and was used for the pre-test and post-test. The Rosenberg Self-Esteem Scale is a widely used self-report instrument for evaluating individual self-esteem. The Cronbach's alpha reliability coefficient for the scale was 0.77. Scores on the scale range from 0-30. Scores from 25 to 30 indicate high self-esteem, between 15 and 25 are within normal range and scores below 15 suggest low self-esteem. Participants with low self-esteem took part in the study.

5.5 Data Collection Procedure

The researchers personally collected the data with the help of two trained research assistants. An ethical clearance approval letter from the Institutional Review Board of the University of Cape Coast.

During the pre-test (baseline survey), two hundred (200) copies of the Rosenberg Self-Esteem (RSE) Scale were administered to participants in each of the participating institutions making a total of 600 copies. Based on the pre-test scores, sixty (60) participants, 20 from each participating institution) were further sampled to be part of the two experimental groups and one control group. One experimental group (Takoradi Technical University) was exposed to assertiveness training the Cape Coast Technical University group was taken through cognitive restructuring therapy while Accra Technical University was the control group.

A total of ten (10) weeks was used for the data collection exercise. Two (2) weeks were used for the pre-test (baseline survey) and the remaining eight (8) weeks were used for the treatment. Three weeks after the treatment, the post-test was administered to the participants of the treatment and control groups. In all, 60 copies of the RSE Scale were administered.

5.6 Intervention Procedure

Each experimental group was taken through an 8-week training, each session lasting for 2 hours. The comprehensive session plans for the assertiveness training and cognitive restructuring.

5.7 Assertiveness Training Sessions

Session 1: Introduction, Welcoming and Orientation

In this session, the researchers, two research assistants and participants introduced themselves and set goals for the entire training programme as well as the rules that govern the programme. Time for sessions was also fixed together.

Session 2: The Concept and Nature of Self-Esteem

Definitions of self-esteem and how it is formed were given. The benefits of having high esteem were also discussed with participants. Some causes, symptoms and effects of low self-esteem was comprehensively discussed. A take home assignment was given.

Session 3: The concept, nature of Assertiveness and Assertive behaviour

The researchers introduced the concept of assertiveness and described some misconceptions about assertiveness. Participants were taken through discussions on the reasons why individuals become unassertive, effects of not being assertive and the factors that prevent people from being assertive. Smith's Bill of Assertive Rights (Appendix A) was presented to participants. A take home assignment was given.

Session 4: Types of communication Styles

The take home assignment given during Session 2 was processed before the main session. This session focused mainly on the basic ways of interpersonal behaviours sometimes referred to as communication styles. These were aggressiveness, assertiveness, and passiveness. Scenarios were used to help participants to recognize the differences among passive, aggressive and assertive styles of communication and the verbal and non-verbal characteristics of each communication style were introduced. Assertive behaviour was demonstrated in a role-play situation.

Session 5: Sequence of an Effective Assertive Response

A comprehensive explanation on how the inner, unheard dialogue which hinders them from being assertive occurs. These are referred to as values conflicts. The researchers took participants through the types of assertive behaviour such as objective assertion, subjective assertion and defensive assertion. The non-verbal components of an assertive response such as eye contact and body language were discussed. This exercise was followed by role-play. A take home assignment was given.

Session 6: Developing Assertive Skills

Participants were taken through how to give feedback, the importance of feedback and the need to give an honest and clear feedback to each other to promote growth. Participants were allowed to role play some scenarios presented. The need for feedback as well as non-verbal skills and attitudinal and cognitive difficulties revealed by the role-plays were discussed. Homework was given.

Session 7: Assertion Skill Practice: Role-Play- Personal Life Situations

This session was used to help participants to practise more of the learned assertive skills, identify the different types of criticism and why participants may have trouble responding well to criticism.

Session 8: Practice, General Discussions, Evaluation and Post-Test

The researchers summarized the activities of session 1 to 7. There was an open discussion on the entire training. The participants were made to evaluate the training with the use of evaluation forms, the post-test was administered and the training session was terminated.

5.8 Cognitive Restructuring Sessions

Treatment intervention consisted of eight 2-hour sessions held weekly

Session 1: Introduction, Welcoming and Orientation

The researchers introduced themselves and allowed participants to introduce themselves to one another. The researchers set goals for the intervention as well as the rules that were to govern the entire training programme with participants.

Session 2: The concept and nature of self-esteem

Definitions of low self-esteem were given and the symptoms and effects of low self-esteem comprehensively discussed.

Session 3: Concept of Cognitive Restructuring, Basic Irrational Beliefs

A clear definition of cognitive restructuring was also given. Participants were taken through basic irrational beliefs and the role these beliefs play in their daily lives were also looked at.

Session 4: Cognitive Distortions I

The distortion of global labelling was discussed. This is a situation where individuals generalize one or two qualities into a negative global judgment. These are extreme forms of generalizing and are also referred to as “labelling” and “mislabelling.” In this instance, instead of describing an error in context of a specific situation an individual may choose to put a label on himself or herself. For instance, after trying to accomplish a task about two times without success, an individual may call himself or herself a failure or stupid. The distortion of Selective Abstraction was also discussed. This is a situation where people end up forming conclusions based on an isolated detail of an event. Personalization, the tendency to relate everything around one to oneself, was also looked at. In this distortion an individual may tend to think that everything people do or say is some kind of reaction to them. There was a discussion on Blaming, a distortion where an individual holds other people responsible for his or her pain or take the other tack and blame oneself for every problem.

Session 5: Cognitive Distortions II

This session focused on four (4) cognitive distortions namely, all-or-nothing thinking, over-generalization, mind-reading, and emotional reasoning. The impact these can have on self-worth and well-being in general was discussed. All-or-nothing thinking is a distortion where situations are viewed in either/or terms. This occurs when individuals see the world in two categories, rather than in a more complex fashion ‘either you are a success or failure’ in life.

Overgeneralization is a situation where one holds extreme beliefs on the basis of a single incident and applies them inappropriately to dissimilar events or settings was dealt with. With mind-reading, individuals believe they can discern the thoughts of others without any accompanying evidence. Such people are able to assume how people are feeling toward them. Emotional reasoning is a distortion where individuals assume that their feelings are facts even when the evidence points to the contrary. With emotional reasoning individuals’ emotions interact and correlate with their thinking process.

Session 6: Identifying and challenging distorted (unhealthy) thoughts

The researchers assisted participants to identify the unhealthy thoughts discussed which were true with them through questions such as:

1. What was going through your mind when you started to feel this way?
2. What does this situation say about you?
3. What are you thinking about you, other people, or what might happen in the future?
4. What is the worst thing that you think could happen to you?
5. What are you thinking about how other people view you?
6. What are you thinking about other people?

After the identification, participants were taken through the technique of putting their thoughts on trial to challenge the distortions. In this exercise, participants were taught to individually act as a defence attorney, a prosecutor, and a judge on their own cognitive distortions.

Session 7: Behaviour Modification

In this session, the participants were taught how to modify their negative self-statements by replacing them with positive self-statements. Participants were encouraged to focus on developing and testing cognitive restructuring techniques to counter self-defeating statements.

Session 8: Practice, General Discussions, Evaluation and Post-test

The final week focused on rehearsal and application of intervention techniques. There was a general discussion on thoughts, feelings and behaviour and how to cope with situations more constructively. The training was evaluated with the use of an evaluation form, post-test was administered and training was terminated.

5.9 Data Analysis Procedures

One-way ANCOVA and two-way ANCOVA were used to test Hypotheses 1 and 2 respectively. ANCOVA is a general linear model that blends analysis of variance and regression. It evaluates whether the means of a dependent variable are equal across levels of a categorical independent variable often called a treatment, while statistically controlling for the effects of other continuous variables that are not of primary interest, known as covariates or nuisance variables (Pallant, 2005).

Hypothesis 1 was tested using the one-way ANCOVA. The one-way ANCOVA was used to control for possible variance in pre-test scores. The groups were Assertiveness training group and Control group.

6. Ethical Considerations

In this study, participants of the research were protected from any adverse consequences of the study by following laid down rules and procedures of ethics in research. Among the ethical issues that were considered in this study were informed consent, confidentiality, no harm to participants, deception and scientific misconduct. Again, the research proposal together with the instruments went through the Institutional Review Board of the University of Cape Coast for approval and all ethical parameters set were cautiously applied. Respondents were informed about the purpose of the research and what objective it sought to achieve. The questions were read to them and clarifications were made where needed. Participants were also made aware that they had the right to withdraw from the study at any point in time they wished to.

7. Results

7.1 Hypothesis One

H0: There is no significant effect of (a) assertiveness training and (b) cognitive restructuring on the self-esteem of technical university students in Southern Ghana.

H1: There is a significant effect of (a) assertiveness training and (b) cognitive restructuring on the self-esteem of technical university students in Southern Ghana.

This hypothesis was formulated to test the effects of assertiveness training and cognitive restructuring on the self-esteem of technical university students. A one-way analysis of covariance (ANCOVA) was conducted.

Table 2 presents the results of the analysis.

Table 2: ANCOVA of tests of between-subjects effects comparing post-test scores of groups on self-esteem

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1519.795 ^a	3	506.598	35.974	.000	.658
Intercept	259.456	1	259.456	18.424	.000	.248
Pre-test	118.695	1	118.695	8.429	.005	.131
Condition	1386.155	2	693.078	49.216*	.000	.637
Error	788.605	56	14.082			
Total	27278.000	60				
Corrected Total	2308.400	59				

*Significant, $p < .05$;

From Table 2, the results indicate a significant difference in the self-esteem post test scores for participants in the assertiveness training group and cognitive restructuring group after controlling for the scores on the self-esteem test administered prior to the intervention, $F(1, 56) = 49.216$, $p < .001$, partial eta squared = .637. The partial eta squared value of .637(63.7%) suggests that the conditions explain the level of self-esteem by 63.7%. A post hoc (Tukey) test was conducted to find out where the differences lie. Table 3 presents the post hoc test.

Table 3: Pairwise comparisons of groups on self-esteem

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.
Cognitive R.	Assertiveness T.	-2.001	1.188	.098
	Control	9.049*	1.188	.000
Assertiveness T.	Cognitive R.	2.001	1.188	.098
	Control	11.050*	1.187	.000
Control	Cognitive R.	-9.049*	1.188	.000
	Assertiveness T.	-11.050*	1.187	.000

*Significant, $p < .05$;

7.2 Hypothesis Two

H0: There is no significant difference in the effect of (a) assertiveness training and (b) cognitive restructuring techniques on the self-esteem of male and female students in technical universities in Southern Ghana.

H1: There is a significant difference in the effect of (a) assertiveness training and (b) cognitive restructuring techniques on the self-esteem of male and female students in the technical universities in Southern Ghana.

The purpose of this hypothesis was to find out the differences in the effects of assertiveness training and cognitive restructuring techniques on the self-esteem of male and female students. A two-way analysis of covariance (ANCOVA) was conducted. Table 4 presents the results of the hypothesis.

Table 4: ANCOVA of tests difference in assertiveness training and cognitive restructuring in terms of gender (Self-esteem)

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1561.475 ^a	6	260.246	18.466	.000	.676
Intercept	247.131	1	247.131	17.536	.000	.249
Pre-test	119.841	1	119.841	8.504	.005	.138
Gender	4.279	1	4.279	.304	.584	.006
Condition	1194.384	2	597.192	42.375	.000	.615
Gender * Condition	31.999	2	15.999	1.135	.329	.041
Error	746.925	53	14.093			
Total	27278.000	60				
Corrected Total	2308.400	59				

From Table 4, the results show no significant interactions between gender and the conditions in terms of self-esteem after controlling for the pre-test scores on the self-esteem, $F(2, 53) = 1.14$, $p = .329$, partial eta squared = .041. There was also no significant main effect of gender, $F(1, 53) = .304$, $p = .584$, with a small effect size (partial eta squared = .006). The partial eta squared value of .006 (0.6%) suggests that gender explains the levels of depression by 0.6%. These results further suggest that male and female students responded same way to the two types of interventions they received on self-esteem. In other words, gender did not discriminate the effectiveness of the two therapies.

8. Discussion of Results

The findings of the study indicate that participants in the two intervention groups (assertiveness training and cognitive restructuring) recorded better scores in the post-test scores as compared to the participants in the control group. The cognitive restructuring group performed better than the control group with a difference of 9.049. The assertiveness training group also performed significantly better than the control group with a difference of 11.050.

The finding implies that the self-esteem of participants of the two experimental groups improved significantly after the intervention. This indicates that the intervention programmes were effective and, therefore, able to make an impact on the participants. The post-test was administered three (3) weeks after the treatment programme. The post-test scores, therefore, suggest that participants of both treatment groups were able to put into use in their everyday lives, the various skills they acquired in the training. The improvement in the self-esteem and depression levels of participants across treatment groups is consistent with Bandura's (1977) assertion that psychological procedures, whatever their form can alter the level and increase the strength of an individual's self-efficacy. The result confirms the findings by Liza (2010) that cognitive restructuring programme had a positive significant effect on the students' self-esteem and consequently concluded that cognitive restructuring techniques could tangibly enhance self-esteem. The findings also agree with the results of the study by Addison, Antwi and Avonokadzi (2014) that cognitive restructuring enhanced self-esteem which led to the improvement of academic performance.

Furthermore, the findings of the study agree with findings of Anyaneme, Chiyela and Nneka (2016) that assertiveness training had an effect on the low self-esteem of students by raising or enhancing their self-worth and competence. Again, the findings are consistent with the assertion of Mahmoud and Hamid (2013) that assertiveness training led to significant improvement in the self-esteem levels of participants after the training programme. Shimizu et al. (2004) opined in their study that their subjects (hospital nurses) had their self-esteem improved significantly after the assertiveness training programme and therefore concluded that assertiveness training programme had the potential to improve self-esteem.

Similarly, the finding also corroborates the assertion of Ryan and Deci (2004) that human beings in their healthiest state are active, and were ready to learn, explore and master their environment. They also stressed that true self-esteem was imputed when there was a balance between the psychological needs of competency, relatedness and autonomy. During the intervention period participants had the opportunity to interact with their group members and this helped them to develop a sense of belongingness among themselves. Again, since members of the group had similar characteristics, the relationship they developed among themselves helped them to draw strength from one another as they shared their experiences and expressed their opinions freely in an environment devoid of threat and intimidation, which raised their confidence to learn and acquire skills for daily living.

The findings of the study lend support to findings of Ozşaker (2013) who reported a significantly stronger relationship between assertiveness and self-esteem. Lin et al. (2004) also observed that assertiveness helped to improve self-esteem level of the experimental group. Sert (2003) observed significant differences between the two groups based on assertiveness scores. Mahmoud and Hamid (2013) revealed a significant improvement in the self-esteem levels of participants at post-test. They attributed the improvement in mean score of assertiveness, self-esteem and academic achievement after the training programme to the contents of the training programme, which included proper assertive behaviour and clarification, and confirmation of the individual's fundamental rights. The findings of the study have generally shown that assertiveness training and cognitive restructuring interventions can improve the self-esteem of individuals. This shows that assertiveness training is important for students particularly those with self-esteem issues.

The finding is also consistent with findings of Emmanuel, Okreke and Anayochi (2015) who reported that cognitive restructuring programmes have a positive significant effect on the students' self-esteem indicating that cognitive restructuring technique can tangibly enhance self-esteem. The findings further lend support to CBT Los Angeles (n.d.) that cognitive restructuring gives people new ways of thinking and talking to themselves about their problems, help them to recognize unhelpful thinking patterns and replace them with more effective thinking patterns. Participants' exposure to the cognitive restructuring technique helped them to develop a new mindset about themselves, thereby enhancing their self-esteem. Likewise, Liza (2010) in her study among high school students found that cognitive restructuring programmes have a positive significant effect on the students' self-esteem. She found that the cognitive restructuring technique can tangibly enhance self-esteem.

On the basis of gender, the results revealed no significant main effects in the self-esteem post test scores for participants in the assertiveness training group and cognitive restructuring group. The results also showed that males and females responded in the same way to the two types of interventions they received on self-esteem. This finding is consistent with the finding of Tannous (2015) whose study result did not show any statistically significant difference in the effectiveness of assertiveness training programme on self-esteem in relation to gender even though the report indicated that assertiveness training programme was effective in improving self-esteem among students. The finding of the current study, however, is at variance with research findings of DuBois, Burk-Braxton, Swenson, Tevendale and Hardesty (2002). Their study revealed a significant difference in the self-esteem scores at post-test when the influence of gender was ascertained. According to them, gender difference has been shown to play important roles in determining routes of adolescent self-esteem. The findings of the study are also inconsistent with findings of Carlson, Uppal and Prosser (2000) who also found a significant gender difference in self-esteem of students. They further indicated that girls regularly experienced sharper declines than boys in their levels of self-esteem. The findings are also at variance with Wild, Flisher, Bhana, and Lombard (2004) whose report indicated that significant gender difference existed in self-esteem with regard to assertiveness training and cognitive restructuring. The current findings are inconsistent with Akbari, Mohamadi and Sadeghi (2012) who reported a significant difference in student self-esteem after assertiveness and cognitive restructuring training when the effect of gender was computed. (Anhalt, 2015) have found that many men suffered equally from low self-esteem. According to the study, the difference between men and women lay in the source of their low self-esteem and not the degree to which they experience low self-esteem.

Furthermore, the findings of the current study are inconsistent with findings of Anhalt (2015) that men looked to social comparisons to fuel their self-image based on a large component of their self-worth on their ability to be the "provider" in comparison with others. Men also compared physical appearance, intelligence, independence, and status with others in their workplace, family, or social group. On the contrary, women relied on reflected appraisals as the source for their self-esteem. This means that many women relied on how others viewed them for their self-esteem. The reflected appraisal process concludes that people come to think of themselves in the way they believe others think of them (Anhalt, 2015). Anhalt (2015) pointed out that men with low self-esteem were more likely to engage in negative thought distortions that make them view themselves as coming up short when compared to their male counterparts. On the other hand, women who suffered from low self-esteem were more likely to engage in negative

thought patterns of jumping to conclusions, assuming that others were judging them harshly. Iruloh and Amadi (2008) added that assertive training helps to teach an individual on how to assert himself or herself despite the intimidation and pressures coming from other people.

The current findings contradict the report of Hollandsworth and Wall (1977) reported men were more assertive than women were, upon experiencing cognitive restructuring and assertiveness training. Their finding showed that men failed to deal more on items regarding their bosses and supervisors than women. Men also reported themselves as being more outspoken when stating opinions and they take initiatives more readily in social contexts with members of the opposite sex. Women, on the other hand, reported themselves as more assertive in expressing love, affection, and compliments as well as expressing anger to one's parents. These sex differences in assertive behaviour affected assertion-training groups.

9. Conclusions

From the findings of the study, assertiveness training and cognitive restructuring techniques had positive effects on students' self-esteem and are, therefore, viable techniques for improving the self-esteem of students. Gender had no influence on the effectiveness of the two techniques as far as improving self-esteem is concerned.

It is recommended that counsellors should use assertiveness training and cognitive restructuring to enhance the self-esteem of students especially freshers who have just come from the senior high schools to technical universities. This would help students get adjusted to campus life easily, seeing themselves as being good individuals having unique qualities. This will boost their confidence knowing they would be able to do things as other people and improve upon their lives.

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