

Original Paper

Effects of Motivational Interviewing and Mindfulness-based Cognitive Therapies on Academic Burnout among Extra-mural Students in Ekiti State

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Received: June 17, 2023

Accepted: July 24, 2023

Online Published: August 9, 2023

doi:10.22158/fet.v6n4p1

URL: <http://dx.doi.org/10.22158/fet.v6n4p1>

Abstract

Academic burnout is a mental and emotional fatigue state caused by continuous stress among extra-mural students. This syndrome is usually caused by repeated failure and overload of work in the school, which eventually leads to high dropout rate, truancy and failure. Academic burnout hinders academic success of students, as it truncates their advancement in moving to the next academic stage. Previous studies focused largely on predictors of academic burnout of in-school adolescents, while little attention was paid to extra-mural students. This study, therefore, was designed to determine the effects of Motivational Interviewing Therapy (MIT) and Mindfulness-Based Cognitive Therapy (M-BCT) on academic burnout among extra-mural students in Ekiti State, Nigeria. Moderating effects of academic self-efficacy and goal setting were also examined.

Pretest-posttest control group quasi experimental design with 3x3x3 factorial matrix was adopted. Three extra-mural centres were randomly selected in Ekiti State, while the simple random sampling technique was used to select participants from each of the remedial study centres. The remedial centres were randomly assigned to MIT (29), M-BCT (51) and control (25) groups, making a total of 105 participants. The instruments used were Academic Burnout Indicator Inventory (for screening – $\alpha=0.92$), Maslach Academic Burnout ($\alpha=0.70$), Academic self-Efficacy ($\alpha=0.86$) and Goal Setting ($\alpha=0.80$) scales and instructional guides. Data were subjected to descriptive statistics, Analysis of covariance and Scheffe post-hoc test at 0.05 level of significance. Participants' age was 22.14 ± 3.15 years. The majority of the participants were female (61.5%). There was a significant main effect of treatment on academic burnout of the participants ($F_{(2;84)}=140.13$, partial $\eta^2=0.77$). The participants in the control group (111.04) had the highest mean scores on academic burnout, followed by the M-BCT (88.20) and the MIT (61.59) groups. There was no significant main effect of academic

self-efficacy and goal setting on academic burnout. There was a significant interaction effect of treatment and goal setting on academic burnout ($F_{(2;84)} = 3.93$, partial $\eta^2 = .16$), in favour of the participants with high goal setting from the MIT group. Motivational interviewing and mindfulness-based cognitive therapies reduced academic burnout among extra-mural students in Ekiti State, Nigeria. Counselling psychologists and other help professionals should adopt these therapies.

Keywords

Academic burnout, Extra-mural students, Ekiti State, Motivational interviewing, Mindfulness-based, Cognitive therapies

1. Introduction

In every nation of the world education could be considered as the springboard of societal development. United Nations Educational Scientific and Cultural Organization (UNESCO) noted that twenty-six per cent of a country's annual budget should be allocated to the educational sector. However, the situation in Nigeria is different. A poorly managed system of education portends negative results to the developmental struggles of any nation (Famade, 2012). This seems to be the case in Nigeria.

Academic burnout is a state of mental and emotional fatigue caused by continuous stress in academics. This syndrome is usually caused by repeated failure and overload of work in school. It is a problem that affects young adults, in which secondary students who do not make Ordinary Level results at once are distressed, traumatized, stigmatized and somehow hopeless. Some of these students become burden to themselves, parents, teachers, society and government. Some of the students may opt for something else, like yahoo-yahoo, first class prostitution, cultism, armed robbery and suicide by ideation.

Many researchers have attributed the decline in the quality of education to government inability to take appropriate action on education. Some also argue that teachers are not doing enough work. Teachers also are blaming parents and the children (Arong & Ogbadu, 2010; Famade, 2012).

Different kinds of intervention strategies have been put in place to salvage the situation, particularly with respect to formulating and implementing appropriate policies. However, not much has been achieved because the number of students coming for enrolment in these centres yearly is increasing. For instance, data from the Ekiti State Ministry of Education stated that, in 2014, 408 students registered for West African School Certificate Examination, and only 48 students passed with credits in five subjects, including English and Mathematics; likewise, 475 candidates registered in 2015 of which 45 students passed English Language and Mathematics at credit level that qualify the students to gain admission into university. Again, 502 candidates registered for the same examination in 2016 of which 46 students passed. The 2017 enrolment was high and the performance was very bad; out of the 525 students that sat for the examination, only 40 students scale through (Ekiti State Ministry of Education, 2017).

This suggests that the problem in the Nigerian educational sector might not be totally due to administrative or structural imbalance. This is because even when the government takes positive steps

in lifting the standard of education, for example through creation of extramural centres in all the local government headquarters in the state, the results achieved may not be commensurate with the effort put to it. This is why considered it important to examine whether the students are overstretched based on the kind of workload they are exposed to or they are not motivated to benefit from education outcomes. Furthermore, students have a lot of responsibilities in dealing with the enormous challenges in their educational pursuit (Donley, 2013). It has been observed that students in extramural classes are more prone to developing stress than other students in regular classes (Aiken & Poghosyan, 2010). Academic burnout is a challenge that many students face today (Poghosyan, Clarke, Finlayson, & Aiken, 2010). Extramural classes are non-formal school establishments for learners who are unable to meet up with the criteria for moving to the next level of formal schooling (Anyanwu & Oyediji, 2012). These centres are organized for students to enhance their capacity in performing excellently and meet-up with the academic requirements for progression to the next academic level. This group of students is of different categories. For instance, some are receiving lecture for West Africa Examination Council WAEC/SSCE, National Examination council (NECO), some others are being coached for Joint Admission and Matriculation Board (JAMB), National Board of Technical Examination (NABTECH), and General Certificate Examination (GCE). All of them have the same goal, just to sit for examination and come out in flying colours. In Nigeria, even though there are no formal records of these centres, observations showed that these centres are all over major cities and towns in the country. While most of the extramural centres are privately organised, some states of the federation make provision for this set of people. One of such is Ekiti State. Remedial centres are drawn out for these categories of students for which government normally posts secondary school teachers from the Teaching Service Commission (TESCOM) to teach them at the speculated area, even during the school hours.

The majority of the students attending these centres have not been able to improve on the results. This may be because the students are faced with different challenges, including psychological, social and health-related issues, such as being depressed, being academically exhausted, stress, and all manners of intimidations from parents and peers. The continuous poor academic performance has resulted into many students being academically frustrated, having low academic motivation, being academically dejected and becoming emotionally exhausted, all leading to academic burnout.

Academic burnout is an outcome of frustration resulting from prolonged tension after not performing to an expectation in academic pursuit. Those students who failed WASCE in their first attempt often reregister in the so-called miracle centres and extra-mural classes, hoping that solutions will come after two or three attempts. Balogun and Oyediji (2008) opined that academic burnout is an important problem that has association with poor academic performance. It is perceived as an emotional exhaustion syndrome, depersonalization and a reduction in personal achievement (Maslach & Jackson, 2012). When students are exhausted academically, the motivation to try more might not be there. Pines and Aronson (2014) view academic burnout as an encounter that is categorized by physical exhaustion and emotional exhaustion, as well as production of low energy and chronic fatigue of extramural

students. Academic burnout refers to a sense of fatigue owing to study requirements, cynical approach to school work and a feeling of inability for students (Zhang, 2007).

Students attending extramural lessons may be involved in structured, tough activities. Numerous studies on educational lifestyle stress also consider learners as a type of employee (Chambel & Curral, 2005), counsellors, educators and undergraduate students are grouped at secondary and higher education levels of combustion scale. Cordes and Dougherty (2013) argue that the students' exhaustion syndrome also related to those of employees in service. Academic burnout of students can also lead to a greater rate of absence in school, less motivation, lower commitment, reduced productivity and low morale.

Akindele (2012) states that academic burnout rises from the nervousness of rebuke from parents and teachers, psychological depersonalization and peer influence concerning the disappointment of not performing up to the tasks of the proper academics. Although, a moderate level of feeling exhausted is essential for academics to be successful, such as taking note, involving in group discussion, doing assignment both curricular and extra-curricular activities. However, manifestation of academic burnout proves to be destructive for students, because it is negatively correlated with the future of the students (Kumar, 2015).

The consequences of academic burnout are quite enormous. According to Akindele (2012), academic burnout may significantly impede a person's ability to function well and adversely have emotional impact on their social and behavioural domains. It ranges from psychological, emotional to psychological social well-being. In addition, academic burnout can also cause cerebral agony like frustration, anxiety, fear, hostility, or depression, less commitment, absenteeism, higher turnover and reduction in output, low morale, and reduction in human believed (Maslach & Pines, 2012; Maslach, 2014). Akanbi (2013) opines that school exhaustion is a common experience among students and has a devastating effect on performances in education and overall well-being. To mitigate the issue of academic burnout and its consequences on students, parents, teachers, counselling psychologists, government and other stakeholders, there is need for psychological interventions. Therefore, this study employed Motivational Interviewing Strategy and Mindfulness-based Cognitive Therapy to reduce academic burnout among the students attending extramural classes in Ekiti State, Nigeria.

Motivational interviewing therapy (MIT) was first described by Miller (1983), elaborated and developed later by Miller and Rollnick (1991). It is a patient-centred, directive counselling style which focuses on intrinsic motivation. When applying MIS, the therapist creates a rapport with the client in order to explore and resolve ambivalence about the behavioural change. It is a non-judgemental, non-confrontational and non-adversarial therapeutic approach for eliciting behavioural change by assisting the students to explore and resolve ambivalence. The approach attempts to create awareness for students on the potential problem caused and risks of the behaviour in question. The expert practising MIS helps the client to achieve a targeted goal for better future. This strategy tries to help clients to think about their behaviour and consider what might be gained through the expected change attitudes.

Subsequently, in a perfect world, Motivational Interviewing therapy could be used viably with any group populace that has missed inclination (inner conflict) towards change. Motivational Interviewing Strategy (MIS), as a proof construct rehearse that focuses in light of expanding group' inspiration for change, which has indicated guarantee with a wide assortment of group populaces and exhibiting issues that has been demonstrated in numerous investigations (Bennett, Roberts, Vaughan, Gibbins, & Rouse, 2007; Hokanson, Anderson, Hennrick, Lando, Kendall, Pollak, Bastian, & Brouwer, 2007; Slagal & Gray, 2007). However, the researcher opined that if the components of MIS that is; collaboration, evocation and autonomy can be introduce to the extra-mural students, it can assist in managing academic burnout. Motivational Interviewing Strategy has not been tested with extra mural students, across all behavioural domains, and in different setting. Since this study is measuring the use of Motivational interviewing strategy and mindfulness-based cognitive therapy with clients in extra mural studies has not yet been done, this investigation will add to the collection of research identified with MIT use with different populaces. It is on this note that the researcher is combining the Mindfulness-Based Cognitive Therapy.

Another psychological intervention that can be used is mindfulness-based cognitive therapy (M-BCT). It provides opportunities of insight into the nature of thoughts and feelings asking events in the mind rather than integral aspects of the self or valid thoughts on reality (Teasdale, Segal, Williams, & Mark, 2005; Teasdale, 2009, 2009b; Segal, Williams, & Teasdale, 2009). It combines meditation and breathing exercises, and other mindfulness techniques, with cognitive therapy. This technique could help people avoid repeated bouts of depression (NICE, 2013). Mindfulness is viewed as a capacity that is available to everyone, although there could be differences with respect to how individuals differ in their propensity to exhibit it (Walsh, 2000; Brown & Ryan, 2003; Kabat-Zinn, 2003). The literature suggests that mindfulness practice increases attentive presence, empathy, acceptance and self-awareness, besides reducing stress (Baer, 2003; Bishop, 2004; Brown & Ryan, 2004; Fulton, 2005; Lazar, 2005).

As insight is achieved, mindfulness exposes habits of the mind that propagate suffering and unhappiness and unstable mind, such as greed, anger, or various detrimental behaviours (Seigel, 2009). This range is also reflected in the ongoing debate within the psychological literature as to what exactly constitutes the construct of mindfulness (Carmody, 2009). This debate is centres around whether or not mindfulness is equal to mental skill utilized as a part of practising mindfulness, a state or trait which emerges as a result of mindfulness practice (Brown, Ryan, & Creswell, 2007). Therefore, this finally continues to be difficult to generalize and compare research findings when differing definitions of mindfulness have been used and this should be considered while comparing and contrasting the research conclusion contained within this dissertation (Bishop, 2004; Chiesa & Malinowski, 2011).

Although cognitive behaviour therapy (CBT) has been proven in treating Generalized Anxiety Disorder (GAD), a great percentage of the patients have remaining symptoms of the problem. The development of mindfulness can be useful to people with GAD. Likewise, a group treatment derived from mindfulness-based stress reduction (MBSR), called mindfulness-based cognitive therapy (M-BCT), was

propounded by Jon Kabat-Zinn et al. Mindfulness-based stress reduction utilizes preparing in care contemplation (mindfulness meditation). Mindfulness-based cognitive therapy fuses cognitive strategies and has been successful in decreasing relapse in many patients. It has also been found to be effective in the prevention of relapse and recurrence in major depression (Teasdale, Segal, Williams, Ridgeway, Soulsby, & Lau, 2000).

Mindfulness-based cognitive therapy may be an agreeable and effective management for decreasing academic burnout with increase in awareness of everyday experiences in students who feel empty and hopeless.

There are several factors that have been identified by researchers as capable of influencing academic burnout of extra-mural students. This study will consider academic self-efficacy and goal setting. Academic self-efficacy is regarded as judgements of capabilities to attain academic goals successfully (Bandura, 1997; Adeyemo, 2001; Marat, 2004). A student who can boost his or her academic self-efficacy tends to be capable of facing any challenges met in his/her study. Heman and Gunjan (2014) submit that students with different self-belief demonstrate different levels of cognitive, social and emotional engagement in school. Consequently, when students have low self-efficacy expectations regarding their behaviour, academic burnout could surface, which would even lead to further failure.

Another moderating variable required for experiencing less academic burnout in this study is goal setting. Goleman, (2006) describes academic goal setting as the ability to make plans and set achievable goals that lead to good academic performance which prevent dropping out of school and major determinant of human success. Goal setting measures good academic performance. This is because it includes an increased usage of effective study system. Clear behavioural goals, clear outcomes and measurable ways to monitor set goals are required to achieve improvement in any area.

Academic burnout is a problem to youth and young adults nowadays. It has led many students to early grave; some of these students commit suicide because of their inability to make WASCE or UTME. Some of these students become rogues, vagabonds, criminals, touts and even political thugs. At the end some of them might found themselves holding political offices in which they will be making laws for the citizenry. And of course; this aspect of education all over the country needs serious attention before it's too late without repairs. The future of a nation with such leaders is very bleak.

2. Statement of the Problem

Academic burnout is a common educational problem among millions of students in extramural classes all over the world. Governments and parents have invested so much on education to ensure that students have quality education. Unfortunately, the performance of these students in external examinations has not been impressive. Academic burnout is a major factor that leads to poor academic performance among extramural students. Most students experience academic burnout as a result of unrealistic expectations, repeated failure, works at home, peer pressures, career indecision, and lack of interest in teacher's lesson,

lack of confidence, low self-efficacy, unfavourable learning environment, chronic fatigue, unrealistic academic goals, health worries, boredom, and loneliness, among others.

Extramural students are confronted with numerous problems while attempting to gain admission to higher institutions of learning. Many of these problems are seriously affecting the emotions and overall well-being of these students. They are often neglected; owing to the fact that lesser attention is paid to this group of students by governments, parents, researchers, psychologists and society, in general. Because to this neglect, the students are being stigmatized, traumatized, vilified, and assigned all sorts of opprobrious labels, such as repeaters and retakers. This has deleterious effects on their psychological and mental health. High incidence of psychopathology, such as depression, loneliness, terrorism, social withdrawal, trauma-related shame, dropping out of school, certificate forgery, kidnapping, suicidal ideation, mental derail, academic burnout and death by suicide exist among the extramural students in different centres in the country.

This menace of academic burnout has become worrisome and calls for concern of students, parents, teachers, school counsellors, school administrators, governments and international organizations. Also, the performance of students in external examinations which leads to academic burnout has a lot of consequences. The situation has led to many students outright abandoning schooling, emotional exhaustion, depersonalization of personalities, Internet fraud, high-rank prostitution among females, suicide ideation, political thuggery, armed robbery and many others. It makes the students unable to accomplish academic goals and show physical characteristics of academic burnout, such as absenteeism, lack of interest in teacher lesson, truancy, bullying, and gambling. All these need to be looked at because of the future of the country. Although, there are several studies on academic stress, academic burnout and academic exhaustion, there has not been any, to the best of the knowledge of the researcher, on post-secondary school students attending extramural classes.

Furthermore, the parents of academically burnout students are not left out, as the parents often have to contend with hopelessness, shame and frustration in the family and among friends. Many students in the extra-mural centres behave strangely in the aftermath of these experiences, many have significant distress and develop psychological problems that can be serious or long-lasting, which may eventually lead to low academic self-efficacy and affect their psychological well-being. Past studies have used descriptive studies of correlational type and expo-facto type. Some even carried out experimental studies on students' academic burnout using different psychological interventions. However, none has combined motivational interviewing therapy and mindfulness-based cognitive therapy on academic burnout among students attending extramural class, especially in Ekiti State, Nigeria. Therefore, this study investigated the effectiveness of the two therapeutic interventions on academic burnout among students attending extramural class in Ekiti State, Nigeria.

3. Purpose of the Study

The main purpose of this study was to investigate the effectiveness of motivational interviewing strategy and mindfulness-based cognitive therapy on academic burnout among extramural students in Ekiti State, Nigeria. In addition, the study examined the interaction effect of the intervention strategies with the moderating variables (academic self-efficacy and goal setting) on academic burnout of the participants.

The specific objectives were to:

- examine the main effect of treatments on academic burnout among extra-mural students;
- investigate the extent to which academic self-efficacy influences the reduction of academic burnout among extramural students;
- ascertain the moderating influence of goal setting on academic burnout among extra-mural students;

4. Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

- 1) There is no significant main effect of treatments on academic burnout among extramural students.
- 2) There is no significant main effect of academic self-efficacy on academic burnout among extramural students.
- 3) There is no significant main effect of goal setting on academic burnout among extramural students.

5. Methodology

This study employed a pretest-posttest quasi experimental design with a 3 x 3 x 3 factorial matrix. The experimental group (motivational interviewing strategy (MIT) and mindfulness-based cognitive therapy (M-BCT) were the intervention groups). There two moderating variables. Academic self-efficacy varied at three levels of high, moderate and low; and goal setting also varied at three levels of high, moderate and low.

6. Population

The population consisted of all the extramural students across the local government areas in Ekiti State. Ekiti State, one of the six states in South-West Nigeria, has 3 senatorial districts, with a total number of 16 local government areas.

7. Sample and Sampling Technique

The multistage sampling technique was used in selecting the participants of the study. The participants were extramural students, receiving lectures to write WASSCE examination, SSCE and UTME in the

three chosen areas. At the first stage, the state was divided into 3 senatorial districts, as recognized by the national constitution: Ekiti Central Senatorial District, Ado Ekiti; Ekiti North Senatorial District, Ido Ekiti; and Ekiti South West Senatorial District, Ilawe Ekiti. At the second stage, from each of these senatorial districts, 1 local government each was selected. At the third stage, 1 extramural centre was selected in each of the local governments selected through balloting. In the last stage, from each of the 3 centres, 30 of these students were selected based on the screening test score and eligibility criteria.

After the screening, MIS centre was randomized to 30 participants, in which 29 participants completed the treatment session. Group 2 at Ado Ekiti was also screened and it was discovered that burnout students were about 95. The school management pleaded for increase in the number of the participants; the researcher then randomized to 53 but only 51 completed the treatment session. The control group at Ilawe Ekiti had 25 participants. A total of 105 participants were used for the study.

8. Instrumentation

This study utilized four instruments for collection of data. The first instrument Academic Burnout Indicator Inventory was used to screen the participants. The other three scales (Maslach Burnout Inventory-Student Survey (MBI-SS), Academic Self-Efficacy Scale and Goal Setting Scales) were utilized for collecting data from the participants.

9. Academic Burnout Indicator Inventory

This indicator inventory was adapted from School-Burnout Inventory developed by Salmela-Aro, Kiuru, Leskinen, and Nurmi (2009). It was used to screen the students. It contains 9 items, for “I feel tired when teacher is teaching in the class”, and “I always feel bored before I get to school”. The responses are in the form of Yes (1) or No (0). Students that chose at least 5 yes-answers were considered to be having academic burnout. The instrument has a reliability coefficient of .92 Cronbach’s alpha reliability (α), which is considerably high. The instrument was subjected to revalidation procedure. The scale was administered to extramural students in another area entirely. The result showed Cronbach α of .632. This is an indication that the scale is valid and reliable for the use among the participants.

10. Maslach Burnout Inventory–Student Survey (MBI-SS)

This inventory was adopted from Schaufeli, Martínez, Marqués-Pinto, Salanova, and Bakker (2002), who proposed the use of the MBI–Student Survey to assess academic burnout in students. It has 15 items in all. This inventory includes three subscales: Exhaustion was measured with five items (for instance, “I feel emotionally drained by my studies”); Cynicism was measured with four items (such as, “I have become more cynical about the potential usefulness of my studies”). For this study, all items were scored on a 4-point frequency rating scale, ranging from 1: strongly disagree to 4: strongly agree. High scores on Emotional Exhaustion and Cynicism, and low scores on Efficacy are indicative of

burnout (Efficacy items are reverse-scored). For its reliability, Schaufeli (2002) reported that a Cronbach α for the full scale was above .70. This indicates that the inventory is very valid and reliable to measure academic burnout among students. However, the scale was subjected to revalidation procedure and the result of the test established Cronbach α equal to .606. This implies that the scale is valid and reliable for use among these participants.

11. Academic Self-efficacy Scale

The Academic Self-efficacy Scale was adapted from Self-efficacy for Learning (SEL) developed by Klobas, Renzi and Nigrelli (2007). The scale has two broad sub-sections. The first is Information Processing, which covers knowledge, synthesis, analysis, understanding, evaluation. The second sub-section is finding, which covers aspects such as library, distinguishing sources, web and writing. The scale contains 10 items. It is a four-point Likert scale, ranging from strongly agreed to strongly disagree. Sample items include “soon after the end of a lesson, I am able to remember all of the key concepts”, and “I am able to find materials in the library a subjects that interests me”. Strongly agreed received 4 points, while strongly disagreed received 1 point. For the Information Processing subscale, the reliability Cronbach alpha was .83, while the reliability coefficient for the Finding subscale was .810. The whole scale was found to be valid and reliable, as the reported Cronbach α for the full scale was .860. The scale was revalidated by the researcher through the process of administering the scale to extramural students in another area. The result established Cronbach α of .753. This implies that the scale was valid and reliable for use among extramural students in Ekiti State.

12. Goal Setting Scale

The Goal Setting Scale was developed and validated by Midgley (1998) to specifically assess the goals of students. The scale assessing a task-goal orientation has six items ($\alpha=.83$), including “An important reason I do my work in school is because I want to get better at it” and “An important reason I do my work in school is because I like to learn new things.” The scale assessing an ability-approach goal orientation has six items ($\alpha=.86$), including “I want to do better than other students in my classes” and “I’d like to show my teachers I’m smarter than the other students in my classes.” The scale assessing an ability-avoid goal orientation has 6 items ($\alpha=.74$), including “One of my main goals is to avoid looking like I can’t do my work” and “The reason I do my schoolwork is so my teachers don’t think I know less than others.” The Cronbach’s alpha (α) for the scale assessing a goal orientation was .80. This indicates a reliable co-efficient and suitability for this study. However, the scale was subjected to revalidation procedure through pilot-testing by the researcher. The result of the test proved the Cronbach α equal to .794. This implies that the scale was valid and reliable for use among the participants.

13. Procedure for Data Administration and Collection

The researchers screened the respondents with Academic Burnout Indicator Inventory Scale in order to assess the level of academic burnout among them. Those respondents who scored 5 and above were used for this study. A student was expected to choose at least 5 yes-answers before he/she could be considered to be having academic burnout. The research covered a period of eight weeks of eight sessions of training for the participants. The study was carried out in four phases: pre-session activities, pre-test, treatment and post-test. The pre-session activities included the screening, recruitment and assignment of the participants to the two experimental groups and control group.

Eligible participants in the two groups were exposed to an eight-week experimental sessions, while the control group received no treatment. A preliminary meeting was organized to get familiar with the interested participants and to solicit their support and willingness to participate in the study. At the pre-test stage, Academic Self-efficacy Scale (SES), Goal Setting Scale (GSS) and Maslach Burnout Inventory-Student Survey (MBI-SS) were administered to the participants. Those in the two experimental groups were exposed to eight weeks of treatment. The control group was not treated; the participants in this group were exposed to a lecture titled “career development”. The post-test was administered following the conclusion of the programme.

Proper arrangement was made in organizing a suitable venue for the training sessions. The provision for remuneration was made by the researcher throughout the sessions to encourage the participants for their consistency and cooperation. Data were collected before and after the experimental sessions. The participants for the treatment group received training on motivational interviewing strategy and mindfulness-based cognitive therapy as summarized below. The data collected from these participants were then analysed. The analysis is presented in chapter four of this thesis.

14. Method of Data Analysis

Analysis of Covariance (ANCOVA) was used to analyse the data. ANCOVA showed the significant difference between the participants in the treatment groups and the control group, while a Scheffe-hoc revealed the mean differences among the treatment groups and the control group.

15. Results

The results were presented hypothesis by hypothesis and this is done based on the analysis of the three hypotheses formulated for the study.

Hypothesis One: There is no significant main effect of treatments in reduction of academic burnout among extra mural students.

To test this hypothesis, Analysis of Covariance (ANCOVA) was adopted to analyse the post-test scores of the participants on their level of academic burnout using the pre-test scores as covariate to ascertain

if the post-experimental differences are statistically significant. The summary of the analysis is presented in Table 1 below.

Table 1. Summary of 3x3x3 Analysis of Covariance (ANCOVA) Post-test in Reduction of Academic Burnout among the Extramural Students

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	38758.165 ^a	20	1937.908	32.303	.000	.885
Intercept	1269.241	1	1269.241	21.157	.000	.201
Preacabu	575.760	1	575.760	9.597	.003	.103
Treatment	16813.676	2	8406.838	140.134	.000	.769
Acaselfeff	205.203	2	102.602	1.710	.187	.039
Goalsetting	35.894	2	17.947	.299	.742	.007
Treatment * Acaselfeff	290.513	4	72.628	1.211	.312	.055
Treatment * Goalsetting	942.010	4	235.503	3.926	.006	.157
Acaselfeff * Goalsetting	680.267	3	226.756	3.780	.013	.119
Treatment * Acaselfeff * Goalsetting	252.268	2	126.134	2.103	.129	.048
Error	5039.264	84	59.991			
Total	825546.000	105				
Corrected Total	43797.429	104				

a. R Squared = .885 (Adjusted R Squared=.858)

The results from Table 1 showed that there was significant main effect of treatments in reduction of academic burnout among the participants ($F_{2, 84} = 140.134$, $p < 0.05$, $\eta^2 = 0.769$). This means there was significant difference in the mean scores of the academic burnout reduction of the extramural students exposed to motivational interview strategy (MIT) and mindfulness-based cognitive therapy (M-BCT) when compared with the control group. Hence, hypothesis one was not accepted. It was, therefore, concluded that there is significant main effect of treatments in reduction of academic burnout of extramural students. This implies that MIT and M-BCT are effective in reducing academic burnout of extramural students.

To further provide information on the reduction of the severity of academic burnout of the participants among the three groups (MIT, M-BCT and Control), it is good to ascertain the direction of the differences and determine the magnitude of the mean scores of the participants in each of the

treatments and the control group). Thus, the Scheffe post-hoc analysis was calculated. The result is presented in Table 2.

Table 2. Significant Differences in the Treatment Groups

TREATMENT	N	Subset for alpha = 0.05		
		1	2	3
Motivational Interview Therapy	29	61.5862		
Mindfulness-based Cognitive Therapy	51		88.1961	
Control	25			111.0400
Sig.		1.000	1.000	1.000

The following observations were made from Table 2:

- (i) There was statistically significant difference between the post-hoc test mean scores in reducing the academic burnout of the extra mural students in the MIT and M-BCT groups. However, the participants in the MIT (Mean=61.5862) benefited more than those in the M-BCT (Mean=88.1961)
- (ii) There was significant difference in the post-hoc test mean scores in reducing the academic burnout of the extramural students in the MIT and control groups. The participants in MIT (Mean=61.5862) reduced the academic burnout significantly higher than those in the control group (Mean=111.04).
- (iii) There was significant difference in the post-hoc test mean scores in reducing the academic burnout of the extramural students in the M-BCT and control groups. The participants in M-BCT (Mean=88.1961) reduced the academic burnout significantly higher than those in the control group (Mean=111.04).

In other words, there was significant difference between the mean score of the participants in MIT and M-BCT and those in the control group. Conversely, MIT and M-BCT were more effective than the control group; MIT had the greatest potency of reducing academic burnout of the extramural students than M-BCT.

Hypothesis Two: There is no significant main effect of academic self-efficacy in reduction of academic burnout of the extra mural students.

The results from Table 2 showed that there was no significant main effect of academic burnout of the extramural students ($F_{2, 84}=1.710$, $p>0.05$, $\eta^2=0.039$). This means that there is no significant difference in the mean scores of the academic burnout of the extra mural students in the low, moderate and high academic self-efficacy levels when compared with each other. Hence, hypothesis two was accepted.

Hypothesis Three: There is no significant main effect of goal setting in reduction of academic burnout of the extramural students.

The results from Table 1 indicated that there was no significant main effect of goal setting in reduction of academic burnout of the extramural students ($F_{2, 84} = 0.299$, $p > 0.05$, $\eta^2 = 0.007$). This means that there was no significant difference in the mean scores of the academic burnout reduction of the extramural students in the low, moderate and high goal-setting levels when compared with each other. Hence, hypothesis three was accepted.

16. Discussion of Findings

Hypothesis one states that there is no significant main effect of treatment on the students' academic burnout. The result of the study showed a significant main effect of treatment on academic burnout among the participants. The implication is that motivational interviewing therapy and mindfulness-based cognitive therapy were effective in reducing academic burnout of the participants. Therefore, the null hypothesis was rejected, as the result in Table 1 indicated that, despite the fact that both treatments were effective the result clearly indicated the marginal difference between the treatment programmes. The results revealed that the extramural students in the motivational interviewing therapy group displayed lower academic burnout than those in mindfulness-based cognitive therapy. This is to say that motivational interviewing therapy was more potent in reducing academic burnout of extramural students in Ekiti State. The result attested to the fact that academic burnout could be reduced with the effective use of motivational interviewing therapy and mindfulness-based cognitive therapy training.

This finding correlated with the work of previous researchers (Feldstein & Ginsburg, 2006; Nage, 2010), which established a significant effect of motivational interviewing therapy on student's academic burnout levels. Motivational interviewing therapy has been used to address school problems, dropouts and many others. It was also used for time management, improving school adolescents and promoting the status of school adolescents that are suffering from depression (Brody, 2009). Nage (2010) reported that motivational interviewing strategy enhanced better classroom management, increased student's motivation, and most especially students' ability.

Mojataba, Parvin, Mohammad, Saber and Ali (2015) found that motivational interviewing therapy is very effective in enhancing academic self-efficacy and improving self-concept in underdeveloped students; extramural students could be viewed as underdeveloped because of their inability to make their results at once and the syndrome of repeated failure. The result showed that the scores of self-efficacy and self-concept of subject had a significant increase after motivational interviewing therapy.

Hypothesis Two: This hypothesis asserts that there is no significant main effect of academic self-efficacy in reduction of academic burnout of extramural students. The hypothesis was accepted since the result revealed that there was no significant main effect of academic self-efficacy on the

academic burnout of the participants. This connotes that academic self-efficacy did not moderate the influence of treatment on burnout students.

This result supported Uchenna (2015), who found that academic self-efficacy had negative relationship with school burnout, as school burnout decreased with higher academic self-efficacy. A probable explanation for this finding is the assumption that academic self-efficacy is a psychological concept which refers to how strongly people believe they can boost their self-efficacy in preparing for West Africa Examination Council examinations. The way the participants ascribed responsibility and blame for not having self-efficacy affected their academic burnout.

However, the result substantiates the study of Charkhabi (2013), who examined the relationship between academic burnout, quality of learning experience and academic self-efficacy. The investigation indicated that all relationships between academic burnout and its components with academic self-efficacy were significant. The students with high academic burnout had higher scores in academic self-efficacy than students with low academic burnout. This indicates that one can have high academic self-efficacy and still be burning out academically.

This result might be attributed to the fact that the students had zeroed their minds on the notion that one cannot sit for WAEC examinations once and pass. The negative thoughts and feelings about these external examinations could cause the students to be burnt out academically.

Hypothesis Three: Hypothesis three states that there is no significant main effect of goal setting on the academic burnout of the participants. The hypothesis was accepted since the result revealed that there was no significant main effect of goal setting on the academic burnout of the participants. This implies that there is no significant different among student's academic burnout irrespective of the level of their goal setting level.

This study corroborates the study of Otanga and Ogembo (2014), which investigated demographic variables, school time, future goals and predictors of school burnout, which was measured by exhaustion, cynicism and inadequacy. It was hypothesized that student's perception of the content of the future goals (whether intrinsic/extrinsic) motivates the performance of current class work and therefore negatively predicts school burnout. Similarly, the study of Tabachinick, Miller and Relyea (2008) also proved that personally valued intrinsic future goals predicted task instrumentality, whereas personally valued extrinsic future goals failed to produce significant relationship. Essentially, the findings of many studies revealed that setting future goals might not reduce academic burnout of students.

17. Conclusion

The study investigated the application of motivational interviewing strategy and mindfulness-based cognitive therapy on academic burnout among extramural students in Ekiti State, Nigeria. The study made use of academic self-efficacy and goal setting as moderating variables. Training programme was

conducted for the participants, who were extramural students. Relevant data were collected and analysed using appropriate statistical tools.

Motivational interviewing therapy and mindfulness-based cognitive therapy were very effective in reducing academic burnout among the extramural students. By implication, if the principles are adequately applied to extramural students in Ekiti State, there will be reduction in academic burnout, which will enhance good performance of students in external examinations. Motivational interviewing strategy was found to be more effective in treating the academic burnout of extramural students. Academic self-efficacy played a mediating role on the causal effect of treatment on the academic burnout of the students, while goal setting had significant influence on academic burnout.

18. Recommendations

Based on the findings of this study, the following recommendations are essential:

- Student should be screened for academic burnout so as to determine their status. The government should make provision for this group of students in order to enhance their performance in external examination.
- The students should develop self-efficacy, which will assist them to do the right things at the right time.
- Students' counsellors should be well equipped with skills in MIT and M-BCT and should be compelled to utilize these interventions to reduce academic burnout among extramural students.
- School counsellors and counselling psychologists should make use of psychological interventions, such as motivational interviewing strategy and mindfulness-based cognitive therapy, for students receiving in extramural classes.
- Counselling psychologists should be allowed at the extramural centres to give career talk and moral talk, and also counsel the students on the causes, effects and how to reduce academic burnout.
- Parents should create time to monitor their children both at home and school and cater for their needs.
- The government should provide favourable environment for the students to facilitate teaching and learning.
- Focus group discussion should be organized at intervals to know the students better.

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