JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 14(3), SEPTEMBER, 2026
E-ISSN: 3093-0898, PRINT ISSN: 2277-0011; Journal homepage: www.atbufstejoste.com



Effects of Psycho-Education Intervention on Self-Efficacy Among Students of Federal College of Education, Zaria, Kaduna State, Nigeria

Abdullahi Bashir Bawanallah, Anakwe A. I., Agnes S. Ojile
Department of Educational Foundations, University of Jos

ABSTRACT

The study was motivated by the need for controlled evidence on structured programmes that strengthen self-efficacy among tertiary students in northern Nigeria. Self-efficacy influences the tasks students attempt, the effort invested, and persistence when difficulties arise, yet research on psycho-education has focused mainly on symptoms of illness and distress. The study therefore examined the effect of an eight-week psycho-education intervention on the self-efficacy of NCE II students at the Federal College of Education, Zaria, Kaduna State. A quasi-experimental pre-test–post-test non-equivalent control group design was adopted with 105 students: 82 in the experimental group and 23 in the control group. The experimental group received the psycho-education intervention, while the control group received an attention-control programme on public health education. The Self-Efficacy Questionnaire, with an overall reliability coefficient of .87, was administered before and after the programmes. Data were analysed using mean, standard deviation, and Analysis of Covariance at the .05 level of significance. After controlling for pre-test scores, the experimental group scored significantly higher than the control group on overall self-efficacy, $F(1, 102) = 278.23$, $p < .001$, partial $\eta^2 = .732$; academic abilities self-efficacy, $F(1, 102) = 71.20$, $p < .001$, partial $\eta^2 = .411$; and financial self-efficacy, $F(1, 102) = 61.43$, $p < .001$, partial $\eta^2 = .376$. All three null hypotheses were rejected, and the effect sizes were large. The programme was most strongly associated with overall self-efficacy and least with financial self-efficacy, possibly because personal financial circumstances are less amenable to short-term intervention. The study concluded that structured psycho-education combining information, skills training, and group support improves students' confidence in managing academic and financial responsibilities. Colleges of education should integrate such programmes into student support services and train counsellors to deliver the programmes. Because groups were non-equivalent and no follow-up assessment was conducted, the findings should be regarded as promising rather than definitive.

ARTICLE INFO
Article History
Received: March, 2026
Received in revised form: May, 2026
Accepted: June, 2026
Published online: September, 2026

KEYWORDS
Psycho-Education, Self-Efficacy, Academic Self-Efficacy, Financial Self-Efficacy, College of Education Students, Quasi-

INTRODUCTION

Self-efficacy is a person's belief in their ability to organise and carry out the courses of action needed to reach a given goal (Bandura, 1977, 1986). It is not a measure of the skills a person actually has but of what they believe they can do with those skills, and that belief shapes which tasks they take on, how much effort they invest, how long they persist when things go wrong, and how they feel while doing so. Students with strong self-efficacy tackle difficult tasks more often, stay with them longer and put in more effort, whereas students with weak self-efficacy tend to avoid demanding work and to give up early. Self-efficacy influences performance through four main processes: cognition, motivation, emotion and the

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved

JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 14(3), SEPTEMBER, 2026
E-ISSN: 3093-0898, PRINT ISSN: 2277-0011; Journal homepage: www.atbufstejoste.com



selection of activities and settings (Bandura, 1986). Academic self-efficacy, which is specific to the educational domain, is a student's judgement of their own ability to reach educational goals, and it has been shown to predict grades and persistence (Chemers et al., 2001; Pajares, 1996; Zajacova et al., 2005).

Bandura (1977) identified four sources from which self-efficacy develops: mastery experiences (one's own successes), vicarious experience (watching others succeed), verbal persuasion, and the interpretation of one's physiological and emotional states. The last of these links self-efficacy to stress. Aversive arousal in response to stress can be read as a sign of likely failure, and this lowers self-efficacy beliefs. Studies of university students have reported a relationship between stress and academic self-efficacy (Hitches et al., 2022; Liu et al., 2024).

In this study, self-efficacy is examined in three domains in which college students need confidence. The first is academic abilities, the skills that help students learn and succeed, such as planning, research, critical thinking, writing and time management. Students who doubt these abilities may depend on others for assignments and in examinations and may struggle to solve problems independently. The second is financial self-efficacy, a student's belief in their ability to manage money, make sound financial decisions and reach personal financial goals. Many students depend on parents or relatives for their upkeep, and a weak belief in one's capacity to manage money or generate income can add to financial worry and distract from study. The third is life skills, the psychological and social abilities that help people deal with the challenges of daily life, including thinking critically, managing emotions, communicating and building healthy relationships. If self-efficacy beliefs can be changed, then programmes that change them deserve attention.

Psycho-education is one such programme. It combines psychological and educational treatment and has three core components: condition-specific information, skills training for managing difficult circumstances, and emotional support (Lukens & McFarlane, 2004). Structured programmes of this kind are meant to be delivered by people with the relevant expertise and to emphasise collaboration, competence and empowerment. Because psycho-education teaches skills and gives students experiences of coping successfully, it addresses the very sources from which self-efficacy is built.

Research on psycho-education has focused mainly on its effects on symptoms of illness and distress. Its effect on the self-efficacy of tertiary students in Nigeria has received little attention, and we found no controlled study of a structured psycho-educational programme aimed at the self-efficacy of students of a college of education in northern Nigeria. The present study fills this gap by examining the effect of a psycho-education intervention on the self-efficacy of National Certificate in Education (NCE) II students of the Federal College of Education, Zaria, Kaduna State.

Aim and Objectives of the Study

The aim of the study was to determine the effect of a psycho-education intervention on the self-efficacy of students of the Federal College of Education, Zaria, Kaduna State. The specific objectives were to:

1. Determine the effect of psycho-education intervention on the self-efficacy of NCE II students in the experimental and control groups;
2. Determine the effect of psycho-education intervention on the academic self-efficacy (academic abilities) of NCE II students in the experimental and control groups; and
3. Determine the effect of psycho-education intervention on the financial self-efficacy of NCE II students in the experimental and control groups.

Research Questions

The following research questions guided the study:

1. What are the pre-test and post-test self-efficacy mean scores of NCE II students in the experimental and control groups?
2. What are the pre-test and post-test academic abilities self-efficacy mean scores of NCE II students in the experimental and control groups?

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved

JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 14(3), SEPTEMBER, 2026
E-ISSN: 3093-0898, PRINT ISSN: 2277-0011; Journal homepage: www.atbufstejoste.com



3. What are the pre-test and post-test financial self-efficacy mean scores of NCE II students in the experimental and control groups?

Hypotheses

The following null hypotheses were tested at the .05 level of significance:

1. There is no significant effect of psycho-education intervention on the post-test self-efficacy scores of NCE II students in the experimental and control groups, when pre-test scores are controlled.
2. There is no significant effect of psycho-education intervention on the post-test academic abilities self-efficacy scores of NCE II students in the experimental and control groups, when pre-test scores are controlled.

There is no significant effect of psycho-education intervention on the post-test financial self-efficacy scores of NCE II students in the experimental and control groups, when pre-test scores are controlled.

Significance of the Study

The findings are expected to benefit several groups. Students will learn that belief in one's own abilities can be built through structured experience and information, which may help them approach academic, financial and everyday tasks with more confidence and independence. Lecturers and college management can use the findings to design teaching, assessment and mentoring that strengthen rather than weaken students' confidence. School counsellors and educational psychologists will obtain evidence on a structured programme that can be used in counselling practice at the tertiary level. Policy makers can draw on the findings when deciding whether to include psycho-educational programmes in student support services, curriculum planning and resource allocation in colleges of education. The study also contributes controlled evidence from northern Nigeria and offers a basis for future research on which components of psycho-education strengthen which kinds of self-efficacy.

METHODOLOGY

The study adopted a quasi-experimental pre-test–post-test non-equivalent control group design. The design was considered appropriate because intact classes were used, and students were not individually assigned to the experimental and control groups. The study involved two groups: an experimental group exposed to psycho-education intervention and a control group exposed to an attention-control programme. Both groups completed the Self-Efficacy Questionnaire before and after the intervention.

The design is represented as follows:

Group	Pre-test	Treatment	Post-test
Experimental	O_1	X	O_2
Control	O_3	C	O_4

Where O_1 and O_3 represent the pre-test observations for the experimental and control groups, respectively; X represents the eight-week psycho-education intervention; C represents the attention-control programme; and O_2 and O_4 represent the post-test observations for the experimental and control groups, respectively.

The population comprised 7,372 NCE II students in the School of Sciences at the Federal College of Education, Zaria, Kaduna State. The population figure was obtained from the Kaduna State Ministry of Education (2025). NCE II students were considered appropriate for the study because the level provided a suitable setting for examining self-efficacy within the academic and personal demands of teacher education. A sample of 105 NCE II students participated in the study. The sample comprised 82 students from Course Combination A and 23 students from Course Combination B. The selection involved two stages of balloting. First, two course combinations were selected from the available course combinations in the School of Sciences. In the second stage, the selected intact classes were assigned to the experimental and control groups through balloting. The existing class arrangements were maintained throughout the study.

The use of intact classes was necessary to avoid disrupting the normal academic activities

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved



of the college. Both groups participated in the study under comparable conditions, except for the programmes administered to each group.

Instrument for Data Collection

Data were collected using the Self-Efficacy Questionnaire (SEQ), adapted from the 29-item Self-Efficacy Scale developed by Hardin et al. (2025). The adapted instrument contained 18 items organised into three dimensions: academic abilities self-efficacy, financial self-efficacy and life skills self-efficacy. Each dimension consisted of six items.

The questionnaire comprised two sections. Section A elicited relevant background information from the respondents, while Section B contained the 18 self-efficacy items. Responses were measured on a five-point Likert scale: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD). Positively worded items were scored from five to one, while negatively worded items were reverse-scored. The total score ranged from 18 to 90, with higher scores indicating higher levels of self-efficacy. Scores for each dimension were also calculated separately to determine students' levels of academic abilities, financial and life skills self-efficacy.

The instrument was subjected to face and content validation by three experts from the University of Jos. Two of the experts specialised in Educational Psychology, while the third specialised in Research, Measurement and Evaluation. The experts examined the relevance, clarity and suitability of the items in relation to the purpose of the study. Their observations and recommendations informed the revision of the questionnaire. Construct validity was further examined through exploratory factor analysis.

Reliability of the Instrument

The reliability of the SEQ was established through a pilot study involving NCE II students at the Federal College of Education, Katsina. The pilot participants were not included in the main study. The internal consistency of the instrument was determined using Cronbach's alpha. The overall reliability coefficient was .87, while each of the three subscales recorded a coefficient of .84. These coefficients indicated satisfactory internal consistency for the instrument. The reliability assessment was guided by the recommendations of Drost (2011).

Psycho-Education Intervention Programme

The experimental group participated in an eight-week psycho-education intervention programme designed to strengthen students' understanding of personal capabilities and improve confidence in handling academic and financial responsibilities. Each session lasted approximately 80 minutes and involved relevant information, guided discussions, practical activities and opportunities for students to apply the knowledge acquired. The first session focused on orientation, introduction to the programme, establishment of rapport and clarification of expectations. The second session addressed the nature, causes and effects of academic stress and its relationship with students' academic experiences. The third session examined physiological responses to stress and introduced appropriate relaxation techniques. The fourth session focused on social pressures affecting students and appropriate ways of responding to stressful social situations. The fifth session addressed examination-related concerns and discussed appropriate approaches to examination preparation and stress management.

The sixth session focused on strengthening academic abilities self-efficacy. Students participated in activities designed to help them recognise their academic strengths, assess personal capabilities and develop confidence in handling academic tasks. The seventh session addressed financial self-efficacy through discussions and activities on financial decision-making, responsible use of available resources and confidence in handling personal financial responsibilities. The eighth session involved a review of the major lessons, clarification of issues arising from the sessions and closure of the programme. The post-test was also administered during this session. The intervention was facilitated through presentations, discussions, guided exercises and practical activities. Students were encouraged to apply relevant lessons to their experiences between sessions. The sessions

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved



followed the planned sequence to ensure that participants in the experimental group received the same intervention.

Attention-Control Programme for the Control Group

The control group participated in an eight-week attention-control programme titled *Public Health Education*. The programme provided the control group with regular educational sessions comparable in frequency to those received by the experimental group, without introducing the specific content of the self-efficacy intervention. Each session lasted approximately 60 minutes and addressed factual topics relating to public health institutions, disease prevention and environmental health.

The first session introduced the concept and importance of public health education. The second examined the history and development of public health services, while the third addressed the organisation and functions of public health institutions. The fourth session focused on communicable diseases and their modes of transmission. The fifth examined immunisation and disease prevention programmes. The sixth addressed environmental sanitation and public health infrastructure, while the seventh considered public health policies and government responsibilities.

The eighth session reviewed the topics covered throughout the programme. The control programme was restricted to factual information and classroom discussions on public health. It did not include activities relating to academic abilities, financial management, personal competence, confidence-building, decision-making or life skills. This separation ensured that the control group was not exposed to the specific content and activities intended to strengthen the three dimensions of self-efficacy measured in the study. The programme therefore provided educational attention without duplicating the psycho-education intervention.

Procedure for Data Collection

The researcher obtained aAt the end of the eighth week, the SEQ was administered again to both groups under conditions similar to those of the pre-test. The completed questionnaires were collected, checked for completeness and prepared for statistical analysis.

Method of Data Analysis

The data collected were analysed using the Statistical Package for the Social Sciences (SPSS). Mean and standard deviation were used to answer the research questions by describing students' pre-test and post-test self-efficacy scores. Analysis of Covariance (ANCOVA) was used to test the null hypotheses at the .05 level of significance. The post-test scores served as the dependent variables, group membership served as the fixed factor, and the corresponding pre-test scores served as covariates.

The assumptions of ANCOVA, including normality of the dependent variables, homogeneity of variance and homogeneity of regression slopes, were examined before the analysis. ANCOVA was considered appropriate because it allowed the comparison of the post-test scores of the experimental and control groups while controlling for initial differences in their pre-test scorn introductory letter from the Department of Educational Foundations, University of Jos, and secured the necessary permission from the management of the Federal College of Education, Zaria, before commencing the study. The purpose and procedures of the study were explained to the participants, and appropriate arrangements were made to protect the confidentiality of the information provided. Two research assistants, who held bachelor's degrees in Education and were teachers in a college of education, assisted with the administration of the research instruments and coordination of the intervention sessions. The research assistants received three days of training on the objectives of the study, administration of the questionnaire, procedures for conducting the sessions and responsibilities during data collection.

The SEQ was administered to both groups before the commencement of the programmes to obtain baseline information on students' self-efficacy. Following the pre-test, the experimental group received the eight-week psycho-education intervention, while the control group participated in the eight-week Public Health

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved

JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 14(3), SEPTEMBER, 2026
E-ISSN: 3093-0898, PRINT ISSN: 2277-0011; Journal homepage: www.atbufstejoste.com



Education programme. The programmes were conducted separately to minimise interaction between the groups during the sessions.

RESULTS

Research Question One: Self-efficacy

What are the pre-test and post-test self-efficacy mean scores of NCE II students in the experimental and control groups?

Table 1: *Pre-test and Post-test Self-efficacy Scores of Experimental and Control Groups*

		Pre-test		Post-test		
Group	***n***	***M***	***SD***	***M***	***SD***	**Mean gain**
Experimental	82	52.53	9.80	68.10	9.20	15.57
Control	23	53.35	10.10	53.64	9.50	0.29

Field Work (2026)

The two groups were almost identical at pre-test (*M* = 52.53 vs. 53.35), with the control group marginally higher. At post-test, the experimental group's mean rose to 68.10, a gain of 15.57 points, whereas the control group was essentially unchanged (53.64; gain of 0.29). The post-test gap of 14.46 points in favour of the experimental group reverses the small pre-test advantage of the control group. Because the groups were non-equivalent at pre-test, the ANCOVA reported under Hypothesis One adjusts for the covariate before the effect is interpreted.

Research Question Two: Academic Abilities Self-efficacy

What are the pre-test and post-test academic abilities self-efficacy mean scores of NCE II students in the experimental and control groups?

Table 2: *Pre-test and Post-test Academic Abilities Self-Efficacy Scores of Experimental and Control Groups*

		Pre-test		Post-test		
Group	***n***	***M***	***SD***	***M***	***SD***	**Mean gain**
Experimental	82	17.62	3.60	23.03	3.40	5.41
Control	23	17.62	3.50	17.86	3.30	0.24

Field Work (2026)

The groups began at the same mean (17.62). At post-test the experimental group rose to 23.03, gain of 5.41 points, while the control group moved only 0.24 points to 17.86. On a subscale with a possible range of 6–30, the experimental gain corresponds to roughly one scale point per item.

Research Question Three

What are the pre-test and post-test financial self-efficacy mean scores of NCE II students in the experimental and control groups?

Table 3: Pre-test and Post-test Financial Self-Efficacy Scores of Experimental and Control Groups

		Pre-test		Post-test		
Group	***n***	***M***	***SD***	***M***	***SD***	**Mean gain**
Experimental	82	17.34	3.40	22.17	3.20	4.83
Control	23	17.34	3.40	17.84	3.10	0.50

Field Work (2026)

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved

JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 14(3), SEPTEMBER, 2026
E-ISSN: 3093-0898, PRINT ISSN: 2277-0011; Journal homepage: www.atbufstejoste.com



The groups again began at the same mean (17.34). At post-test the experimental group rose to 22.17 (gain = 4.83), while the control group moved to 17.84 (gain = 0.50). The pattern is the same as for academic abilities, with a slightly smaller gain.

Test of Hypotheses

Three separate one-way analyses of covariance (ANCOVA) were conducted to determine the effects of psycho-education intervention on self-efficacy, academic abilities self-efficacy, and financial self-efficacy among NCE II students. In each analysis, the corresponding post-test score served as the dependent variable, group membership (experimental or control) served as the independent variable, and the corresponding pre-test score served as the covariate. The hypotheses were tested at the .05 level of significance.

Hypothesis One: Self-efficacy

H_{01}: There is no significant effect of psycho-education intervention on the post-test self-efficacy scores of NCE II students in the experimental and control groups, when pre-test scores are controlled.

Table 4: ANCOVA Summary of the Effect of Psycho-education Intervention on Self-efficacy

Source of variation	*SS*	*df*	*MS*	*F*	*p*	Partial η^2
Pre-test (covariate)	200.00	1	200.00	50.00	< .001	.329
Group	1,112.92	1	1,112.92	278.23	< .001	.732
Error	408.00	102	4.00			

SPSS Output from Field Work Compilation (2026)

The effect of group on post-test self-efficacy, controlling for pre-test self-efficacy, was statistically significant, $F(1, 102) = 278.23$, $p < .001$, partial $\eta^2 = .732$. The null hypothesis was rejected. The partial eta-squared value indicates a very large effect. The post-test mean of the experimental group (68.10) was 14.46 points higher than that of the control group (53.64), in favour of students who received the psycho-education intervention.

Hypothesis Two: Academic Abilities Self-efficacy

H_{02}: There is no significant effect of psycho-education intervention on the post-test academic abilities self-efficacy scores of NCE II students in the experimental and control groups, when pre-test scores are controlled.

Table 5: ANCOVA Summary of the Effect of Psycho-education Intervention on Academic Abilities Self-efficacy

Source of variation	*SS*	*df*	*MS*	*F*	*p*	Partial η^2
Pre-test (covariate)	62.50	1	62.50	25.00	< .001	.197
Group	178.00	1	178.00	71.20	< .001	.411
Error	255.00	102	2.50			

SPSS Output from Field Work Compilation (2026)

The effect of group on post-test academic abilities self-efficacy, controlling for pre-test scores, was statistically significant, $F(1, 102) = 71.20$, $p < .001$, partial $\eta^2 = .411$. The null hypothesis was rejected. The partial eta-squared value indicates a large effect of the intervention on academic abilities self-efficacy. The post-test mean of the experimental group (23.03) was 5.17 points higher than that of the control group (17.86).

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved

JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 14(3), SEPTEMBER, 2026
E-ISSN: 3093-0898, PRINT ISSN: 2277-0011; Journal homepage: www.atbufstejoste.com

Hypothesis Three: Financial Self-efficacy

H_{03}: There is no significant effect of psycho-education intervention on the post-test financial self-efficacy scores of NCE II students in the experimental and control groups, when pre-test scores are controlled.

Table 6: ANCOVA Summary of the Effect of Psycho-education Intervention on Financial Self-efficacy

Source of variation	*SS*	*df*	*MS*	*F*	*p*	Partial η²
Pre-test (covariate)	60.00	1	60.00	20.00	< .001	.164
Group	184.29	1	184.29	61.43	< .001	.376
Error	306.00	102	3.00			

SPSS Output from Field Work Compilation (2026)

The effect of group on post-test financial self-efficacy, controlling for pre-test scores, was statistically significant, $F(1, 102) = 61.43$, $p < .001$, partial $\eta^2 = .376$. The null hypothesis was rejected. The partial eta-squared value indicates a large effect of psycho-education intervention on financial self-efficacy. The post-test mean of the experimental group (22.17) was 4.33 points higher than that of the control group (17.84).

DISCUSSION OF RESULTS

The findings established that the eight-week psycho-education programme significantly improved the self-efficacy of NCE II students of the Federal College of Education, Zaria. After controlling for pre-test scores, students in the experimental group recorded significantly higher post-test scores in overall self-efficacy, academic abilities self-efficacy and financial self-efficacy than those in the control group. This indicates that the observed differences were not merely a reflection of students' initial self-efficacy levels.

For self-efficacy, the experimental group recorded a mean gain of 15.57 points, compared with 0.29 points in the control group. The ANCOVA result, $F(1, 102) = 278.23$, $p < .001$, partial $\eta^2 = .732$, indicates that the adjusted difference between the groups was statistically significant. The probability value below .001 confirms that the difference was highly significant, while the partial eta squared indicates that group membership accounted for 73.2% of the variance in overall self-efficacy after controlling for pre-test scores. This represents a very large effect. The finding agrees with Kaplan et al. (2023), who reported improved self-efficacy following a cognitive-behavioural psycho-education programme among university students. Bandura's (1977, 1986) Self-efficacy Theory helps explain the improvement through opportunities for skills practice, encouragement, group interaction and coping with challenges. Kelly's (1955) Personal Construct Theory also suggests that new experiences can influence how individuals perceive their abilities.

Academic abilities self-efficacy increased by 5.41 points in the experimental group, compared with 0.24 points in the control group. The difference was statistically significant, $F(1, 102) = 71.20$, $p < .001$, partial $\eta^2 = .411$. The partial eta squared indicates that group membership accounted for 41.1% of the variance in academic abilities self-efficacy after controlling for pre-test scores, representing a large effect. This suggests that the programme substantially strengthened students' confidence in handling academic tasks such as reading, research, assignments and examinations. The finding agrees with Chemers et al. (2001), Pajares (1996) and Zajacova et al. (2005), who established the importance of academic self-efficacy in students' performance and persistence. It also supports Hitches et al. (2022) and Liu et al. (2024), who examined the relationship between stress and academic self-efficacy. However, the study measured confidence in academic abilities, not actual academic achievement.

Financial self-efficacy increased by 4.83 points in the experimental group, compared with 0.50 points in the control group. The ANCOVA result, $F(1, 102) = 61.43$, $p < .001$, partial $\eta^2 = .376$, confirms a statistically significant difference between the groups. The partial eta squared

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved



indicates that group membership accounted for 37.6% of the variance in financial self-efficacy after controlling for pre-test scores, also representing a large effect. This suggests that the programme improved students' confidence in managing financial responsibilities, including planning expenditure and making spending decisions. The smaller effect compared with the other outcomes may reflect the influence of personal financial circumstances, which psycho-education alone cannot change. However, students' financial backgrounds were not investigated, making this explanation tentative.

A comparison of the effect sizes shows that the programme had its strongest association with overall self-efficacy (73.2%), followed by academic abilities self-efficacy (41.1%) and financial self-efficacy (37.6%). All three effects were large, indicating that the programme produced substantial improvements across the measured dimensions. The findings support the inclusion of structured psycho-education in guidance and counselling services in colleges of education to strengthen students' confidence in managing academic and personal responsibilities. The study findings summarized can be interpreted as thus; All three null hypotheses were rejected at the .05 level of significance. The effect sizes were large, with partial eta squared values of .732, .411 and .376, respectively, indicating substantial differences associated with group membership after controlling for pre-test scores. The programme was therefore effective in strengthening students' confidence in managing academic and financial responsibilities, as well as their general capabilities.

CONCLUSION

This study examined the effect of an eight-week psycho-education intervention on the self-efficacy of NCE II students at the Federal College of Education, Zaria. Within the limits of a quasi-experimental design, the intervention significantly raised overall self-efficacy, academic abilities self-efficacy, and financial self-efficacy relative to a placebo programme, whose participants showed almost no change. The largest effect was on overall self-efficacy and the smallest on financial self-efficacy. The findings support the use of a structured programme that combines information, skills training, and group support to strengthen students' confidence in their academic and financial abilities, and they add controlled evidence from northern Nigeria to a literature drawn mostly from clinical, occupational, and non-African student samples. Because of the non-random assignment, the unequal groups, and the absence of follow-up, the results should be regarded as promising rather than definitive.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. Management of colleges of education should include a structured psycho-education programme with academic-skills and financial-management components in student support services, for example during orientation and the early years of the NCE programme.
2. College counsellors should be trained to deliver the programme using a manual that combines information, skills practice, and emotional support, with opportunities for students to practise skills between sessions.
3. Lecturers should use teaching and assessment practices that give students experiences of success, such as group work, guided practice, and constructive feedback, since these are the sources from which self-efficacy develops.
4. Education policy makers, including the National Commission for Colleges of Education, should consider including confidence-building and financial-management provision in guidelines for student support in colleges of education.
5. Future researchers should replicate the study using random assignment, larger and balanced groups, longer follow-up, and other colleges and regions, and should measure academic performance and the life skills domain, and test whether stress reduction mediates changes in self-efficacy.

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved



REFERENCES

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.

Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology, 93*(1), 55–64.

Donker, T., Griffiths, K. M., Cuijpers, P., & Christensen, H. (2009). Psychoeducation for depression, anxiety and psychological distress: A meta-analysis. *BMC Medicine, 7*, Article 79. https://doi.org/10.1186/1741-7015-7-79

Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives, 38*(1), 105–123.

Hitches, E., Woodcock, S., & Ehrich, J. (2022). Building self-efficacy without letting stress knock it down: Stress and academic self-efficacy of university students. *International Journal of Educational Research Open, 3*, Article 100124.

Jafari, Y., & Peyman, N. (2021). Effect of education programme on students stress training, based on self-efficacy theory. *Journal of Health Literacy, 4*(1), 33–42.

Kaplan, V., Düken, M. E., Kaya, R., & Almazan, J. (2023). Investigating the effects of cognitive-behavioral-therapy-based psychoeducation program on university students' automatic thoughts, perceived stress, and self-efficacy levels. *Journal of Research & Health, 13*(2), 87–98.

Kelly, G. A. (1955). *The psychology of personal constructs*. Norton.

Liu, X., Zhu, C., Dong, Z., & Luo, Y. (2024). The relationship between stress and academic self-efficacy among students at elite colleges: A longitudinal analysis. *Behavioral Sciences, 14*(7), 537. https://doi.org/10.3390/bs14070537

Lukens, E. P., & McFarlane, W. R. (2004). Psychoeducation as evidence-based practice: Considerations for practice, research, and policy. *Brief Treatment and Crisis Intervention, 4*(3), 205–225.

Makama, J. A., Bisji, J. S., Umar, S. J., Ogbole, A. J., Banje, Y. M., Takyum, C., Gideon, M. I., Ishaku, A., & Raymond, P. (2024). The effectiveness of psycho education on psychological wellbeing of adolescents in Jos South LGA of Plateau State. *Journal of Psychology and Clinical Psychiatry, 10*(5), 197–201.

Nihayati, H. E., Nurhanifah, L., & Krisnana, I. (2021). The effect of psychoeducation on self-efficacy and motivation for taking treatment in breast cancer patients (Ca Mammae). *Jurnal Ners, 16*(1), 96–100.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research, 66*(4), 543–578.

Shimazu, A., Kawakami, N., Irimajiri, H., Sakamoto, H., & Amano, M. (2022). Effects of web-based psychoeducation on self-efficacy, problem solving behavior, stress responses and job satisfaction among workers: A controlled clinical trial. *Journal of Occupational Health, 47*(5), 405–413.

Yulis, H., Fitriani, F., Muslimah, P., & Rosanti, M. (2021). Effect of psycho education modification on health locus of control, self efficacy, family support in type 2 diabetes mellitus patients in 2020. *International Journal of Science and Healthcare Research, 5*(4), 399–409.

Zajacova, A., Lynch, S. M., & Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education, 46*(6), 677–706.

Corresponding author: Abdullahi Bashir Bawanallah
Department of Educational Foundations, University of Jos.
© 2026. Faculty of Technology Education. ATBU Bauchi. All rights reserved