# IMPROVING PRE-SERVICE TEACHERS' ACHIEVEMENT IN AND ATTITUDES TO ECONOMICS THROUGH PSYCHO-PERSONAL VARIABLES FOR SUSTAINABLE DEVELOPMENT IN IBADAN, OYO STATE

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**Abstract**
*This study investigated the extent to which psycho-personal variables (success expectancy, epistemological belief and emotional intelligence) predict pre-service Economics teachers' achievement and attitude towards Economics at the University of Ibadan, Nigeria. Multi-stage sampling procedure was adopted in the study. One hundred and twenty students participated in the study. The data collected were analysed using multiple regression analysis at 0.05 level of significance. Findings revealed the existence of a significant relationship between these psycho-personal variables and pre-service Economics teachers' achievement and attitude toward Economics. They are strong predictors of achievement and attitude in Economics among others. Implications of the findings to achievement of sustainable development were discussed such as learning environments in terms of human and materials resources should be development-oriented for knowledge economy among others. From the findings, recommendations were made such as if psycho-personal variables are positively harnessed, there will be improvement in learning outcomes of pre-service teachers in Economics, thereby reducing negative attitude, rote learning, memorization and so on. Pre-service teachers therefore serve as change agents of sustainability with skills and attitudes required to respond to challenges of sustainable development.*

**Keywords:** Economics, success expectancy, epistemological belief, emotional   intelligence

## Introduction

Education is the key to sustainable development. Not only is education crucial to the development of every other Sustainable Development Goals (SDGs), the promotion of every other SDGs involves "educating" in some forms. It is worthwhile, to note that development in every other goals could be difficult without education. In short, education is necessary for protecting the environment and ensuring sustainable development; for advancing gender equality; for extending democracy and good governance; promoting health; production of human power for development among others. However, the quality of education is not determined simply by education theories and principles in education, government promises and allocation of huge sum of money. It is largely dependent on development-oriented teachers and better students learning outcomes that are stable over time (Obayan, 2016). Development-oriented teachers are 21st century teachers who have in-depth knowledge, professional insight, competence and values that engender development (Okebukola, 2010).

Down through the ages, teachers' effectiveness has been the focus of discussion. Many teachers in the system have been reported to lack content-knowledge, pedagogic knowledge and pedagogic-content knowledge (Kareem, 2015; Okebukola, 2010). These problems manifested in education graduates after graduation, in form of shallow knowledge of their teaching subject, poor classroom management and control, poor computer literacy skills, lack of professionalism, lack of self-reliant and poor attitude to work (Obayan, 2016; Gbadamosi, 2012; Okebukola, 2010)

Economics teaching in Nigerian secondary schools is not excluded from inadequacies (Gbadamosi, 2019) despite its importance in the

nation's change agenda and achievement of sustainable development. The world Commission on Environment and Development (WCED) defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Accordingly, sustainable development stands on three pillars-social development, economic development and environmental protection (United Nation Education, Science and Cultural Organisation, - UNESCO, 2015). It entails economic growth which is socially inclusive and environmentally sustainable in the medium and long term (Gbadegesin, 2013). Advocates of sustainable development dwell on encouraging Africa to leap-frog dirty, inefficient technologies and products, thus skipping the most polluting, less sustainable production and process to maximize human welfare over time, this is a concept which optimality'in Economics has dealt with.

More so, the students could acquire economic literacy by learning economic elements of supply and demand, cost, budgeting, profit, financial service market and so on and become responsible consumers and producers of the future. Precisely, the Nigerian government includes Economics in the curriculum of secondary school (Federal Republic of Nigeria - FRN, 2013) by integrating the theoretical foundations of the subject with their practical application. The objectives of teaching Economics at secondary school are to equip students with the basic principles of Economics necessary for useful living and higher education; to prepare and encourage students to be prudent and effective in management of scarce resources; to raise students' respect for the dignity of labour and appreciation of economic, cultural and social values of our own society; and to enable students acquire knowledge for the practical solution of the economic problems of the society in Nigeria and possibly developing countries and the world at large (FRN, 2013)

Meanwhile, to effectively teach Economics at secondary school level, teachers are trained at colleges of education and faculties of education in universities. Precisely, Economics Education is included in Teacher Education curriculum to produce qualified and competent Economics teachers who have mastered the prescribed methods and can apply them creatively, and as a result, ensures quality learning in students. These laudable objectives in Economics teacher education are being undermined by some challenges that can make teaching of Economics to have little or no contribution to achievement of sustainable development. This problem can be seen in the performance and turn-out of Economics graduate at the university as illustrated in table 1.

**Table 1: Economics students Graduation Trends in Teacher Education, University of Ibadan, Ibadan between 2009/2010 and 2013/2014**

| Year of entry | Total entry for Economics Education | 1st class graduates | 2nd class upper graduates | 2nd class lower graduates | 3rd class graduates | Graduates with pass | Non-graduates |
|---|---|---|---|---|---|---|---|
| 2009/2010 | 30 | 4 (13.3) | 13 (43.4) | - | - | - | 13 (43.3) |
| 2013/2014 | 21 | 5 (23.8) | 3 (14.3) | | | | 13 (61.8) |

**Source:** *Teacher Education Department, University of Ibadan, Ibadan*

Table 1 shows that in 2009/10 academic session, 30 students were admitted to study Economics Education. Seventeen (57.7%) students graduated while 13 (43.3%) did not graduate after 4 or 3 years stimulated for UTME and direct entry students respectively in 2012/13 session. Also, 2010/2011 academic session 21 students were admitted; 8 (48.1%) students graduated while 13 (61.9%) did not graduate after 4 or 3 years stimulated for UTME and direct entry students respectively in 2013/2014 session.

Scholars have observed that there are problems in Economics teaching (Gbadamosi & Jegede, 2015; Adeyanju & Adu, 2013; Adu & Galloway, 2015). Economics students do find it difficult to develop effective learning strategies. But this is not because Economics is an inherently difficult discipline to grasp. Rather, the difficulties are of its own making: the form that Economics now take in many universities makes it a difficult discipline to grasp. The Pre-service Economics teachers' programme is one of the programmes confronted with such problems of poor performances which affected the quality of Economics teachers in the country. The low levels of student-teacher interaction, students' failure to ask questions, inadequate instructional materials, poor application of technology, large class size and the use of lecture methods were identified as the main causes of poor achievement and negative attitude to learning Economics (Gbadamosi & Jegede, 2015; Adeyanju & Adu, 2013; Adu & Galloway, 2015 ). Attitude has to do with a disposition to act or react in a particular way as the individual responds to a situation (Amoo & Rahman, 2004). While Gbadamosi (2019) and Iqbal and Muhammad (2015) suggested that teachers should make use of innovative teaching strategy to develop students attitude towards learning for effective transformative teaching. Thus, the students' perceptions of the teachers' disposition towards effective teaching and learning could influence their attitude and thinking toward Economics or any other school subject, which could be positive or negative.

Efforts to analyse the predictor factors of the growing attitude towards and performance in Economics has led many scholars to research on many factors that can warrant the growing phobia towards learning of Economics by undergraduate students. Such factors include class attendance, home and school factors (Gbadamosi & Jegede, 2015; Adeyanju & Adu, 2013); students' attitude, entry requirements and cooperative learning (Adu & Galloway, 2015) among many others, the problem still persists. In spite of the efforts, the problem of poor performance and low-turn out of graduates in Economics education still persist. Present situation will make it very difficult to achieve sustainable development, since, Economics Education is expected to promote sustainable development by equipping the learners with skills and knowledge to survive and thrive by the long term challenge of sustainability. This research therefore, investigated success expectancy, epistemological beliefs and emotional intelligence as predictors of pre-service teacher's achievement and attitude towards Economics.

Lawanto, Santoso and Liu (2012) asserted that expectancy for success is one of the motivational components that lead an individual to believe that he or she has the potential to successfully accomplish a task. This definition includes one's ability (i.e., self-efficacy), confidence (i.e., self-confidence), and control of his or her effort (i.e., control of learning beliefs) to accomplish a task. Such individual thereby develops an interest in activities that will actualize the success. The interest in engaging in a task, on the other hand, is the motivational component that includes intrinsic and extrinsic goal orientations that lead an individual to participate in a task and also his or her evaluation of how interesting, important, and useful the task is (i.e., task value). The expectancies an individual has shape their behaviours as well as the choice they make positively or negatively in the teaching and learning of Economics.

Another variable of interest is pre-service teachers' epistemological beliefs. Epistemological belief is a subject of philosophy that defined one's conception about the nature of knowledge and learning

(Schommer, 1998). It includes specific beliefs about knowledge dimension such as the certainty, simplicity, source and justification of knowledge (Olafson, Schraw & Veldt, 2010). Belief systems of individuals are different which regulate their behaviour about knowledge and learning. Different studies reported that epistemological beliefs influence our motivational beliefs such as our effective use of learning strategies, problem-solving, thinking and learning (Schommer, 1998; Wim & Jansen, 2014) and students' attitudes toward school (Antti, Mervi & Pekka, 2014). It is also associated with academic performance (Ricco, Pierce, Schuyten & Medinilla, 2010). However, pre-service teachers' belief are often not addressed within Teacher Education programmes; there are studies to suggest that it is important to consider pre-service teachers' epistemological beliefs since such beliefs will influence how they approach their studies which will affect how they approach, design and deliver lesson after leaving university.

Emotional intelligence is another important construct in this research. It is a set of competencies which direct and control one's feelings towards work and performance at work (Ajani, 2015). It embraces the ability to monitor one's own and others' emotions, discriminate among them and use the information to guide one's thinking and actions, for the best of situational outcomes. Emotional intelligence (EI), often measured as an Emotional Intelligence outcomes Quotient (EQ), is a term that describes the ability, capacity, skills or a self-perceived ability to identify, assess and manage the emotions of one's self, of other and of groups (Yelkikalan, Hacioglu, Kiray, Ezilmez, Soylemezoglu, Cetin, Somez & Ozturk, 2015). To be successful, it requires the effective awareness, control and management of one's own emotions and that of other people. Emotional intelligence embraces two aspects of intelligence such as understanding oneself, goals, intentions, responses, behaviour and understanding others and their feelings. Study on emotional intelligence of pre-service teachers is important because their capacity to manage their emotions and others is likely to result to success.

Studies have shown that epistemological belief, success expectancy, and emotional intelligence are strongly linked to students' academic success in science-related disciplines such as Mathematics but the extent to which they predict the achievement and attitude of students towards Economics among pre-service Economics students is yet to be determined. This study therefore, investigated the extent to which these psycho-personal variables (success expectancy, epistemological beliefs and emotional intelligence) influence the pre-service Economics teachers' achievement and attitude towards Economics at the University of Ibadan, Ibadan.

**Research Questions**

1. What is the degree of association existing among the psycho personal variables (success expectancy, emotional intelligence and epistemological beliefs) and pre-service teachers' achievement in Economics?

2. What is the joint contribution of the psycho-personal variables (success expectancy, epistemological beliefs, and emotional intelligence) on pre-service Economics teachers' achievement?

3. What is the degree of association existing among the psycho personal variables (success expectancy, emotional intelligence and epistemological beliefs) and pre-service teachers' attitude towards Economics?

4. What is the joint contribution of the psycho-personal factors (success expectancy, epistemological beliefs, and emotional intelligence) on pre-service teachers' attitude towards Economics?

**Methodology**

The study adopted the correlational research design. The population of this study comprised all pre-service Economics teachers in the faculty of education, University of Ibadan. Multi-stage sampling procedure was adopted in the study. Teacher Education and Educational Management Departments were purposively selected because the students in those departments offer Economics as their teaching subject; they also do compulsory courses in

Economics. One hundred and twenty students were used for the study using total enumeration of 300 and 400 levels of 2013/2014 and 2014/2015 sessions.

Five (5) research instruments were used for this study. These are (1) Epistemological Beliefs Instrument towards Economics (EBIC) was adapted by the researcher from Epistemological Beliefs Assessment for Physical Science (EBAPS), which was developed by White, Elby, Fredriksen and Schwarz (1999). It is made up of 10 items on a 4 point likert scale (SA= Strongly Agree, A= Agree, D= Disagree, SD= Strongly Disagree) with a reliability coefficient of 0.79 using Cronbach-alpha. (2) Success Expectancy Scale (SES) was adapted from Success Expectancy Scale on Mathematics developed by Ajani (2015). It is made up of 10 items on a four point likert scale (SA= Strongly Agree, A= Agree, D= Disagree, SD= Strongly Disagree). It has a reliability coefficient of 0.79 using Cronbach-alpha. (Kareem, 2015) Emotional intelligence Scale was adapted from (Schutte, Malouff, Hall, Haggerty, Cooper, Golden, and Dornheim, 1998) with a reliability coefficient of 0. 76 using Cronbach-alpha. It is made up of 10 items on a 4 point likert type scale (SA= Strongly

Agree, A= Agree, D= Disagree, SD= Strongly Disagree). (4) Attitude towards Economics Scale (AES) was adapted from Fennema-Sherman Mathematics Attitude Scales (Fennema and Sherman, 1976) with a reliability coefficient of 0.77 using Cronbach-alpha. (5) Economics Achievement Test of multiple choice format was developed by the researcher and validated with reliability coefficient of 0.82 using Kuder Richardson 20. The data collected were analyzed using descriptive and inferential statistics. Descriptive statistics used include frequency count, percentages and standard deviation to analyze the demographic data and to answer some of the research questions. Multiple Regression Analysis was used to determine the composite and relative contributions of independent variables to dependent variables.

## Results

Research Question 1: What is the degree of association existing among the psycho personal variables (success expectancy, epistemological beliefs, and emotional intelligence) and pre-service teachers' achievement in Economics?

**Table 2: Relationship among the Psycho-personal Factors and Pre-service Teachers' Economics Achievement in Economics**

| Variables | Economics achievement | Epistemological beliefs | Success expectancy | Emotional intelligence |
|---|---|---|---|---|
| **Economics achievement** | 1.000 | | | |
| **Epistemological beliefs** | 0.53 -.423** | 1.000 | 1.000 | |
| **Success expectancy Emotional intelligence** | -.010 | -.157 .865** | -.018 | 1.000 |

Significance at p<.05

The results from table 2 shows a significant negative relationship between Success expectancy and Economics achievement (-.423; p<.05) and Emotional intelligence and Economics achievement (-.010; p>.05). However, there was no significant relationship

between epistemological beliefs and Economics achievement (r=.53; p<.05). The table 1 indicated that there are no two variables that are highly correlated hence; they were not used in error.

**Research Question 2:** What is the joint contribution of the psycho-personal variables (success expectancy, epistemological beliefs, and emotional intelligence) on pre-service Economics teachers' achievement?

**Table 3: ANOVA[a] Table for Regression Analysis**

| Model | Sum of Squares | df | Mean Square | F | Sig |
|---|---|---|---|---|---|
| **Regression** | 11.787 | 5 | 2.357 | 3.774 | .003[b] |
| **Residual** | 71.205 | 114 | .625 | | |
| **Total** | 82.992 | 119 | | | |
| R = 0.377 | $R^2 = 0.142$ Adjusted $R^2 = 0.104$ | | Std Error of Estimate = 0.790 | | |

a dependent variable Economics achievement

The F-ratio revealed that the joint relationship is also significance (F $_{(5,114)}$ =3.774; P<.05). This means that R value is not due to chance but is as a result of the joint effect of the three psycho-personal factors. Also, the table indicated that there is a moderate linear relationship between independent variables and Economics achievement R = 0.377. The three psycho-personal variables accounted for 10.4%

of the total variance in the students' achievement.

Research Question 3: What is the degree of association existing among the psycho personal variables (success expectancy, epistemological beliefs, and emotional intelligence) and pre-service teachers' attitude towards Economics?

**Table 4: The table shows the relationship among the psycho-personal variables and pre-service Economics teachers' attitude towards Economics**

| Variables | Attitude towards Economics | Epistemological beliefs | Success expectancy | Emotional intelligence |
|---|---|---|---|---|
| Attitude towards Economics | 1.000 | | | |
| Epistemological beliefs | .868** | 1.000 | | |
| Success expectancy | -.345** | -.157 | 1.000 | |
| Emotional intelligence | .809** | .865** | -.018 | 1.000 |

Significance at p<.05

The results from the table above shows a positive significant relationships between epistemological beliefs and attitude towards

Economics(r=.868 p<.05). Likewise emotional intelligence and attitude towards Economics

(r=.809 p<.05) but a negative significant relationship between success expectancy and attitude towards Economics (r=-.345, p<.05).

Research Question 4: what is the joint contribution of the psycho-personal factors (success expectancy, epistemological beliefs and emotional intelligence) on pre-service Economics teachers' attitudes?

**Table 5:     ANOVA Table for Regression Analysis**

| Model | Sum of Squares | df | Mean Square | F | Sig |
|---|---|---|---|---|---|
| **Regression** | 73.442 | 5 | 14.688 | 393.231 | .000[b] |
| **Residual** | 4.258 | 114 | .037 | | |
| **Total** | 77.700 | 119 | | | |

R = 0.972 R2 = 0.945 Adjusted R2 =0.943 Std Error of Estimate =0.193

Significant at 0.05 level

R value attained in table 5 is significant ($F_{(5,114)}$ =393.231; P<.05). This means that the R value is not due to chance but as a result of the joint effect of the three psycho-personal factors. The table also revealed a high positive linear relationship between independent variables and Economics teachers' attitude R = 0.972. The independent variables account for 94.5% of total variance in Economics teachers' attitude towards Economics.

**Discussion of findings**
Relationship between success expectancy and Economics achievement was significant but negative which shows that success expectancy possessed by pre-service teacher could bring about achievement in Economics. If the students show lackadaisical attitude towards learning, negative attitude on the lecturer, though the lecturer and their parent might expect them to pass, success expectancy will be low as a result of a poor attitude. In addition, if the teacher is not using good methodology, the achievement will be low, even if success expectancy is high. This relationship could be attributed to the claims of Adeyemo and Chukwudi (2014) that the amount of effort invested is a product of the expectation of success and the value of the rewards.

The study revealed significant negative relationship between emotional intelligence and Economics achievement. This finding is in consonance with that of Adeyemo and Chukwudi (2014), Oluyomibo (2017) that emotional intelligence had significant effect on academic performance. On the other hand, the finding contradicts Ajani (2015) who reported that emotional intelligence did not have a significant relationship with achievement in maths. This study implies that   If the pre-service teachers are not well reinforced it will have negative effect on their emotional intelligence because they will not be happy to learn. They will exhibit fear towards the subject matter as well as the lecturer that communicates the content to the learner. Also, if the lecturer is teaching in abstract and does not relate it to real –life examples, which will stimulate and arouse the interest of the learner, it will affect the emotional intelligence negatively which will result to poor academic performance.

Students' epistemological beliefs about knowledge and learning did not influence achievement in Economics. Students' success is therefore, likely to be determined by some other factors regardless of epistemological beliefs of the learners ranging from naïve to sophisticated (Schommer, 1998). This finding is in support of Ajani (2015) who reported no relationship

between academic achievement and epistemological beliefs of students in Mathematics. While on the other hand, epistemological beliefs were found to influence academic achievement (Ricco, Pierce, Schuyten & Medinilla, 2010; Wim & Jansen, 2014).

It was found that the three variables jointly contributed 10.4% of the variance in pre-service teachers' achievement in Economics which means that their contribution was not by chance. They are all important predictors of achievement of pre-service teachers in Economics.

The results from the study showed that there is direct influence of epistemological beliefs and emotional intelligence on attitude of students towards Economics. The beliefs to receive a vast amount of knowledge or discover knowledge by pre-service teachers have direct influence on their attitude to learning (Chan & Elliot, 2004).

The study also revealed a negative significant relationship between success expectancy and attitude towards Economics. This implies that teachers' expectation and pre-service teachers' attitude to Economics interact inversely and may influence attitude indirectly. If teachers' success expectancy is low, the pre-service teachers' attitude may tend towards negative. Though, this finding contradicts Ajani (2015) that teachers' expectation had positive relationship with students' behaviour.

The study also indicates that the three psycho-personal variables accounted for 94.5% of the total variance in the attitude of pre-service teachers toward Economics. This means that the three predictor variables when taken together are relevant, strong and effective in predicting pre-service teacher attitude to Economics. This result is in line with that of (Ajani, 2015; Wim & Jansen, 2014; Adeyemo & Chukwudi, 2014).

**Implications of the Findings for Sustainable Development**

Not only is education crucial to achievement of all Sustainable Development Goals, the development in every other sectors would be difficult without education. An educated citizenry helps to ensure sustainability of development in all sectors. Meanwhile, we cannot produce graduates for knowledge economy when we fail to expose teachers to development-oriented teacher education. To ensure availability of knowledge-propelled Economics teachers, let us provide ways of overcoming psycho-personal challenges that can serve as barriers to mastery of learning situation and learning materials.

University authority should improve on students' psych-social support services such as counselling centre, sports centre and e-library. The availability of support system enables the university to treat student individually and help troubled students to a level where they can help themselves. If the teacher is half-baked, it will affect their input and output (students) will not be able to get qualitative education. Learning environments in terms of human and materials resources should be students friendly. They are to address all-round development and widening of students' horizons to discover themselves and serve as agents of sustainability in their chosen career.

Learners' conception of learning is crucial for effective delivery of lesson; teacher educators should make teaching interactive. This will enable pre-service teachers discover the importance of effective teaching strategies to promote the attitude of learners to Economics. The Economics lecturers should demonstrate empathy towards learners. It can involve understanding of the emotional outburst and feelings of the pre-service teachers, encouraging them to develop right attitude to learning and practice of learner-centred pedagogy in order to improve academic performance and attitude towards Economics.

Lecturers/teachers of Economics should use the knowledge of emotional intelligence to reduce the pre-service teachers' anxiety towards economics as a subject/course. The adequate emotional intelligence understanding of the lecturers/teachers can be used to dispel the irrational belief of the pre-service teachers towards Economics as one of the most difficult courses/subjects. Lastly, students from Faculty of Education should not be seen as second fiddle in their cognate departments, rather they should imbibe self-regulatory learning for promoting education for sustainable development.

## Conclusion

Psycho-personal variables (success expectancy, epistemological beliefs and emotional intelligence) are strong predictors of students' achievement and attitude towards Economics. If psycho-personal variables are positively harnessed, there will be improvement in learning outcomes of pre-service teachers in Economics thereby reduce rote learning and memorization. Also, it will improve the rate of graduation in Economics, and at long run increase teaching effectiveness. When this is maintained over time, it will respond to challenges of sustainability by equipping learners with skills and attitudes required to respond to challenges of sustainable development as it has been established in several policy statements that education is the main driving force for achievement of Sustainable Development Goals.

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