



VALIDITY OF EDUCATIONAL RESEARCH AND EVALUATION IN NIGERIA

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Abstract:

The paper examined validity of educational research and evaluation in Nigeria. Research and evaluation studies are ongoing progress that process findings needed for National development. The extent to which the findings are generally accepted for use depends on the validity of the instruments used for data collection. Valid instruments are required for research and evaluation studies. The face, content, concurrent, construct and predictive value of the instruments determine the validity of research and evaluation results. The types of research and evaluation were discussed in relation to education. The uses and problems of educational research and evaluation in Nigeria were highlighted.

Keywords: education, validity, research, evaluation, national development

1. Introduction

Research and evaluation produce findings that are needed for national development. Validity of educational research and evaluation in Nigeria is the extent to which the findings are used to solve educational problem. Education is a process that produces the needed manpower for national development. When research and evaluation findings are objectively used for the purpose intended then there is validity. It requires that the instruments used should be reliable and the result should be free extraneous variable. These include history, maturation testing instrumentation, statistical regression, experimental mortality. Sample selection, demand characteristics, experimental bias, evaluation apprehension, causal time order diffusion interference of

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prior/or imitation of treatment, artificiality of experimental settings, interaction effect of testing and extent of treatment verification (Best & Khan, 1989).

Some research and evaluation findings have been published for use in Nigeria while others are not. Most of the research and evaluation studies carried out in the schools and other establishment in Nigeria only end up as unpublished work while others are published and, implemented for the national development. The national policy on education by Federal government of Nigeria (FGN, 1981, 1998, 2004) contains findings from educational research and evaluation. The policy was adopted to help solve educational problems in Nigeria. The implementations of Universal Basic Education (UBE), Continuous Assessment, Guidance and Counselling evaluation findings depends on the reliability of instruments used for data collection, appropriate analysis and applicability of findings to solve educational problems and contribute to national development. Unfortunately, most research and evaluation findings in Nigeria are not published. Some that were published were not implemented for national development. Therefore, there is the need to re-engineer educational research and evaluation for national development. The paper examined the validity of educational research and evaluation in Nigeria. The concept of validity, educational research and evaluation were discussed.

2. Concept of Validity

Validity is a term that is applied to different aspects of research evaluation. One aspect is the instrument used for data collection for both researches: has and evaluation studies. These instruments include test, questionnaire, interview. For observation, rating scale, among others. Validity in this direction is the extent to which any of the instrument measure what it is supposed to measure. This definition is similar to that of the following scholars (Ukwuije, 1996; Colman, 2003; Kpolovie, 2002). There are different types of validity, these include face validity, content validity, and predictive validity and construct validity. Validity of research and evaluation is high when the appropriate instrument type is used.

Another aspect of validity for research and evaluation is the removal of extraneous variable. Thus, the extent to which research and evaluation findings are free from extraneous variables defines validity. Once these variables are removed then research and evaluation findings become valid. The variables could be controlled through the use of randomization and appropriate statistical techniques as pointed in future Wimmer as cited in Osadebe (2008). Another aspect in defining validity is that of use, that is when the findings or results are generally accepted for use, it implies validity. Best & Khan (1989) support that validity can be thought of as a utility. Therefore, the extent of which findings and recommendations are used for the purpose intended determines the validity of research and evaluation in Nigeria.

3. Concept of Educational Research

Education research is a systemic investigation into educational problems using scientific methods. Nwana (1981) has identified educational problems areas to include psychology, sociology, and administration among others. The scientific methods applied in educational research according to Nworgu (2006:2) include:

- 1) identification of a problem;
- 2) definition of problem in precise and clear terms;
- 3) formulation of appropriate hypotheses;
- 4) collection of data necessary for testing hypotheses;
- 5) analysis of the data to test the hypotheses;
- 6) drawing necessary inference or conclusion based on the data.

One of the objectives of education research according to Iwuama, Ogbebor, Ohen & Onwuegbu (1992) is to examine and prove the validity of current educational practice. Educational research serves as a tool for making decision. It gives rise to increase knowledge. Educational research led to the development of instrument for teaching and learning, measurement and evaluation. Educational research forms a pool from which educational planning data are drawn.

In their own view, research is a systematic, controlled, and empirical, a moral, public and critical investigation of natural phenomena and it is guided by theory and hypotheses about the presumed relationship among such phenomena (Kerlinger & Lee, 2000). Similarly, Best & Khan (1989:17) defined research *“as the systematic and analysis and recording of controlled observations that may lead to the development of generalization, principles or theories in predictions and possibly ultimate control of events”*.

Generally, research is a search for solution to problems. Therefore, and educational research is an attempt to find solution to educational problems. Research arch has been grouped into qualitative and quantitative terms. The qualitative is a search for solution to problems through the use of non-measurement techniques while ‘it to quantitative is the search for solution to problems through the use of measurement scores. Qualitative and quantitative research has been noted by Nworgu (2006). There are different types of research. These include: fundamental or basic research, applied research, action research, descriptive research, historical research and experimental research. These fall under educational research (Best & Khan, 1989). Fundamental or basic research is carried out in laboratory situation, sometimes with animal. This type of research is not good for educator. However, educational research is applied action research is limited to educational setting. Historical are research is a process of investigating, recording, analyzing and interpreting the events of past for the purpose of discovering generalizations that are helpful in understanding the past and to a limited extent, in anticipating the in future. Descriptive research describes what is, describing, recording, analyzing and. interpreting conditions that exist. II involves some types of comparison or contrast and attempts to discover relationship between existing non-manipulated variables. On the other side, experimental research describes what will be when certain, variables are carefully controlled or manipulated.

The focus is on variable relationship. These types of research mentioned have applied in education. Another type is evaluation research. This is concerned with judgment or decision. It is applied in education.

4. Concept of Evaluation

Evaluation is very important for educational decisions in Nigeria. Evaluation is judgment or decision derived objectively analyzed data (Osadebe, 2005). It is a statement as: promoted, pass, fail, good, poor, satisfactory, excellent and so on. It involves the use of qualitative and quantitative data. There are different models of evaluation. These include goal-attainment model, judgmental model emphasizing criteria, judgmental model emphasizing extrinsic criteria and decision model (Popham, 1975, Osadebe, 2005).

There are four types of evaluation commonly use in schools. There include: placement, formative, diagnostic and summative. Findings in these areas have been used for placement assessment, formative assessment, diagnostic assessment and summative assessment (Osadebe, 2008). It has also been noted that evaluation is useful in teaching and learning, curriculum development, accountability guidance and counseling administrative and research (Gronlund, 1985, Ukwuije, 1989).

Evaluation serves different purpose in education. Oguniyi as cited in Ukwuije (1989:22) stated the purposes of evaluation as follows:

- 1) to determine the effectiveness of the programme in terms of students behavioural input sample;
- 2) to make reliable decisions about educational planning;
- 3) to ascertain the worth of time, energy and resources invested in a (artifacts programme);
- 4) to identify students' growth or lack of growth in acquiring desirable knowledge, skills, attitudes and societal values 4 sample;
- 5) to help teachers determine the effectiveness of their teaching techniques and validity learning materials;
- 6) to help motivate students who want to learn more as they discover their progress in given tasks;
- 7) to encourage students to develop a sense of discipline and systematic study habits;
- 8) to provide educational administrators with adequate information about teachers' effectiveness and school needs.
- 9) to acquaint parents or guardians with their children's performances;
- 10) to identify problems that might hide or prevents the achievement of set goals;
- 11) to predict the general trend in the development of the teaching-learning;
- 12) to ensure an economical and efficient management of scarce resources;
- 13) to provide an objective basis for determining the promotion of students from one class to another as well as the award of certificates;
- 14) to provide a just basis for determining at what level of education the possessor of a certificate should enter a career.

The purposes revealed the uses of evaluation and become valid when implemented. Formal evaluation studies have played much roles in education.

- 1) to provide a basis decision making and policy formation;
- 2) to asses student achievement;
- 3) to evaluate curricula;
- 4) to accredit schools;
- 5) to monitor expenditure of public funds valid;
- 6) to improve educational materials and programme.

There are similarities for both research and evaluation. These are as follows:

- 1) both engage in disciplined inquiry;
- 2) both use measurement devices;
- 3) both analyzed data systematically with the same techniques;
- 4) both describe their endeavor;
- 5) both depends on technical set of tools.

4. Validity of Research and Evaluation

The validity depends on the process leading to findings of educational research and evaluation and uses of findings for national development. The process according to Trochim, as cited in Osadebe (2008), requires that the instruments, sample and design should be appropriate, and findings be free from threats (extraneous variables). Wimmer, as cited in Osadebe (2008), the internal threats (artifacts or extraneous variables) include history, maturation, testing, instrumentation, statistical regression, experimental mortality, demand characteristics, experimental bias among others. The external threat borders on the sample and generalization process. When findings are wrongly generalized, they lack validity. Another important aspect that justifies validity of research and evaluation is the use or implementation of findings. When findings and recommendations are used for the purpose intended then it justifies the validity of research and evaluation. Nigerian Educational Research and Development Council had contributed in the implementation of research findings. Thus, research and evaluation in Nigeria has been identified as:

- 1) valid for the establishment of educational programmes in Nigeria as reflected in the national policy on education;
- 2) valid for the obtaining of political independence of Nigeria as in historical research;
- 3) valid for judgment or decision on students, behaviour or performance in schools;
- 4) valid for the partial fulfillment on the award of certificates and degrees in university and other tertiary institutions;
- 5) valid for the promotion of lecturers in university and other tertiary institutions in Nigeria;
- 6) valid for the advancement of science and technology;
- 7) valid for judging the effectiveness of educational programmes;
- 8) valid for various educational decisions;

- 9) valid for advancement of knowledge;
- 10) valid for understanding educational phenomena;
- 11) valid for providing solution to educational problem;
- 12) valid for providing educational practice.

However, it should be pointed out that most research and evaluation findings are not valid. This has been observed by Nworgu (2006). Some researchers and evaluators do not use valid and reliable instruments, do not check the extraneous variables and often make wrong generalization or wrong judgment. The worst is that some findings are not implemented while others are wrongly implemented. In most cases, some research and evaluation studies end up as unpublished work. These problems need to be taken care of in order to promote national development. Educational research and evaluation studies should be objectively carried out. It has already been pointed out in Nigeria that education is an instrument for effecting national development (Federal Government of Nigeria, 2004). This requires that educational researchers and evaluators should carry out valid and reliable studies whose findings and recommendations could be implemented for national development.

5. Conclusion

Validity of research and evaluation with regards to education has been, discussed. It was observed that validity is a derived statement of fact that applies to different aspects of research and evaluation. The first is the internal aspect. This requires that the methodology for: research and evaluation studies should be appropriate and reliable that is, the sample and instrument used the appropriateness of statistics or data analysis. The second aspect of validity of research and evaluation is that of external. That is, the findings should be generalized outside the sample. Indeed, its findings are generalized with only the sample used then such study lack validity. There should be generalization on the population of the study. The third aspect of validity is the use of findings. When research and evaluation findings and recommendations are used for the purpose intended then there is validity. It has been observed that most educational research and evaluation findings in Nigeria are not used. Hence, there is the need to reengineer educational research and evaluation for national development.

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