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TEMITOPE S. AKINBINU Mr University of Ibadan, akinbinutope@yahoo.com

MUTAWAKILU ADISA TIAMIYU PROF UNIVERSITY OF IBADAN, ma.tiamiyu@ui.edu.ng

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Attitude of Civil Servants Towards the Use of Research Information in Policymaking in Selected Ministries in Lagos State, Nigeria

Akinbinu, T.S(Corresponding Author), Tiamiyu, M.A

Corresponding author's email; akinbinutope@yahoo.com.

Africa Regional Centre for Information Science, University of Ibadan, Nigeria

Abstract

Information is very essential in any organization especially in a government based environment where information are needed for policy making. However, some of the instruments used for getting information are not well managed by the civil servants who are the custodian of this research information. This study investigated the attitude of policymakers in terms of the types, availability and accessibility of research information in making policy. Focusing particularly on the types of research information needed by senior civil servants in making policies, frequency of use of research information source, accessibility of information for decision making and the challenges encountered in the course of using them. The descriptive research method was adopted, using a pre-tested self-administered questionnaire to gather information from 166 senior civil servants randomly selected from selected ministries in Lagos state, as data collection instrument. Results indicated that information provided by ones ministry, information on project implemented by ones ministry, information on infrastructural development and information on human resources and skills available at ones ministry are the most used information by policymakers in making policy. The study also showed that internal files, colleagues or superior, newspaper, government publication and internet are the most frequently used and accessible information sources for policymaking. Impracticability of research recommendation politically and financially, too much information to absorb and contradictions in information from different researchers are the major constraints to research output. The study recommended among other suggestions that policymakers must consider wider ranges of research information sources for effective policy making.

Keywords: civil servants, research information, policymaking, information use

Introduction

In modern complex organizations, information constitutes not only a very vital resource (perhaps more vital than funds and facilities) but also, apparently the most strategic operational weapon. A well planned and well organized system of information is a prerequisite for effective decision making in any government ministry. Consequently, the possession (awareness) and use of appropriate information ensures organizational functioning (Opeke, 1984). Information use is enhanced if adequate means of exchange of thoughts and efforts among organization members are established. Such writers as Gaibraith as well as Tushman Nadler had contended that organizations could not survive unless a network of information flow is developed among the various operating levels. To survive, an entity (or system) needs to be aware of its environments, process information to make decisions and co-ordinate and control subunits and members. Organizations may thus be seen as composed of individuals with differential responsibilities, each set having a high degree of internal communication and some degree of external communication.

Making information sources readily available and accessible to policy makers in government ministries or institutions could significantly increase the effectiveness of public policies being vital elements in development efforts. Well thought policies are pivotal to achieving key national goals such as alleviating poverty, raising living standards, creating good jobs, ensuring security, strengthen education as well as improving public health and protecting the environment (Aivepeku, 1983). Nevertheless, the utilization and impact of information in policy making are universally often difficult to measure objectively. Moreover, policy relevant research seldom has immediate or direct impact on government decisions, especially in most developing countries (Porker and hicks, 1996). A Good quality policy making depends on high quality information, derived from a number of sources – expert knowledge; existing domestic and international research; existing statistics; stakeholder consultation; evaluation of previous policies; new research, if appropriate; or secondary resources, including the internet. Evidence can also include analysis of the outcome of consultation, costing of policy options and the results of economic or statistical modeling. To be as effective as possible, evidence needs to be provided by, and/or be interpreted by, experts in the field working closely with policy makers. This expertise includes economists and statisticians, employed and on a service-wide basis by the Government Economic Service etc., and social researchers, doctors and other scientists employed by departments. To assess their impact, effective policy making must be a learning process which involves finding out from experience what works and what does not and making sure that others can learn from it too. This means that new policies must have evaluation of their effectiveness built into them from the start.

The civil service as an important government agency has a significant role to play in the areas of planning and policy making .For policy making to be effective, there must be accurate planning. Planning starts with gathering of relevant data and information on the proposed project. The information/data available determines whether the decision taken will be feasible or not. Information is therefore very important for proper planning. Information is presently used to measure the wealth of any nation (Uhegbu and Nwokocha, 1998). It is now collected, stored, maintained and transmitted, bought and sold (all at a price). It has become a factor of production equal to land, labour and capital (Hughes, 1991). It is the heartbeat of the society and the government. It is undoubtedly the basis of decision making and decisions can be as good as information on which they are based. It is obvious that the Nigerian Development objectives such as more food production, improvement of living standards, stable economy, improved healthcare, good education and generation of knowledge via research require continued support. This is also true of government planning bodies involved in the co-ordination of various development programmes in the country (Aiyepeku, 1989).

In the civil service, current and authentic information either research or any other form of information is required by policy makers in policy formulation, planning, monitoring, decision making, plan implementation and evaluation. There is a widespread assumption that research provides an "evidential basis" for policy or, more acceptably perhaps, that research "informs" policy. The notion of research providing a basis for policy is especially problematic in so far as it suggests that the process begins with research which then points to the required policy. This is an empirically and logically unsound view of the nature of policy and its construction. Policy is an ongoing process; it is not a vacuum waiting to be filled. It has a history and a contemporary social political context. It is their before the research comes along: it is not waiting for research to bring it into existence. Research may arouse interest, provoke debate, confirm prejudice, give new insight, challenge pre-existing beliefs but it will... rarely even the predominant informing resource [for policy] (Bridges et al. 2008b)

Research based policy has been defined as "the integration of experience, judgment and expertise with the best available external from systematic research (Davies, 1991). This involves a balance between professional judgment and expertise on one hand and the use of valid, reliable and relevant research evidence on the other .Gray (1997) has suggested that evidence-based policy is a shift from opinion-based decision making to evidence-decision making. Evidence-based decision making draws heavily upon the findings of scientific research (including social scientific research) that has been gathered and critically appraised according to explicit and sound principles of scientific inquiry. The opinions and judgments of experts that are based upon up-to-date scientific research clearly constitute high quality valid and reliable evidence. Those opinions that are based upon such scientific evidence, but

are unsubstantiated, subjective and opinionated viewpoints do not constitute high quality, valid and reliable evidence. Evidence is also often required about why a policy works (or fails to work), how it works, for whom, and under what conditions it works or fails to work. This involves eliciting evidence of the opinions, attitudes and perceptions of different stakeholders in the policy process. Such evidence is particularly important for the successful implementation and delivery of policies, especially across a range of populations and sub-groups. Policies are formulated or made to provide guidance to achieve their goals. The senior civil servants form bulk of planner and initiators. For them to perform their duties effectively they need updated information. In view of the key role of civil service in policy making and the importance of information for development, it has become pretty necessary to know the attitudes of these senior civil servants to research and other information as it will help them base their decisions on current, accurate and relevant data.

Statement of the Problem

The positive impact of the policies made by senior civil servants in government ministries is ineffectual and not felt by non -policy making civil servants and the society at large. The services provided by the government which are based on these policies and decisions of policy makers are not adequate. This has resulted in continued economic deterioration with the result that people are fed up with the government.

Secondly, most of these policies are not research based and the few that are research based are those that conform to their interest which could be political and bias, which in most cases only favor their loyalists and this has led to low productivity, faction and marginalization among civil servants. The issue at stake is that these senior civil servants plan without data and facts. They engage in what Alegbeleye (1996) called "best guess estimating" "planning without facts" and "disjointed incrementalism". The services provided by government which are based on these policies and decisions of policy makers are not adequate. This policies end up as only paper work and not implementable.

In the light of the problem stated above, the following objectives guided the study.

- 1. To investigate the sources of information consulted by policy making civil servants
- 2. To find out the challenges and opportunities of use of research outputs by policy makers in government ministries.
- 3. To understand the extent to which research and other information are available to policy makers in government ministries.
- 4. To investigate the types of information consulted by policy making civil servants
- 5. To examine the accessibility of research and other information to policy makers in government ministries.
- 6. To investigate the frequency of use of research and other information for decision making by policy making civil servants.

Literature Review

Civil servants making policies in government ministries and parastatals all over the world especially in Lagos state, Nigeria are daily confronted with a combination of technological, social, political and economic problems. Generally, developed countries have long recognized that information is a crucial factor in policy formulation, implementation and evaluation and have devoted substantial proportions of their resources to its provision and effective utilization (Lawal, 2009). In most public services in the developing countries, however, the inadequate recognition and use of research as a policy challenge does not appear to be adequately understood. Such process must begin by creating the right atmosphere for generating, processing, disseminating and utilizing hard information (Aiyepeku, 1989).

Opara (2003) sees information as capable of provoking action or inaction in a recipient. Information is also seen as an input which reduces the level of uncertainty in an individual or organization in decision process (Onasoke, 2005). Information can be described as a set of data matched to a particular information need. Ratz (2007) sees information need as a gap in a person's knowledge that when experienced at the conscious level as a question gives rest to a search for answers. The civil servants need

information in the performance of their official duties. Information needs arise whenever individual finds themselves in a situation requiring knowledge to deal with situation as they deem it fit (Tackie and Adams, 2007:69)

Ayepeku (1983) defined the scope of the information needs of civil servants in a manner that reinforced the concept of development needs and the activities carried out by civil servants, to promote the achievement of such needs. These activities include finding facts, assessing trends, and diagnosing problems, identifying the needs, prescribing solution programmes and projects, operating programs and projects, assessing impact of action and evaluating successes and failures. Tiamiyu (1991) looked at information needs by also identifying work activities carried out by civil servants. These work activities included evaluating project proposal, communicating with other ministries, publishing information on projects, implementing and inspecting projects writing reports on public policy issues, summarizing reports, gathering statistical information/data, evaluating reports complied by others, carrying out general administrative duties and providing direct public services among others. Tiamiyu (1991) further stated that civil servants usually need statistical information, directory information, procedural information and general administrative information.

Among the sources of the information required by public policy makers include newspaper, magazines, learned journals, books, monographs, in-house memoranda, (files), indexes, abstracts, conference proceedings, these and dissertation, bulletin form the private sector, government publications, consultancy reports and feasibility reports (Aiyepeku, 1989, Tiamiyu,1991).

Akhidime (1996) noted some of the factors that affect negatively the level of access by civil servants and government agencies to information to that can be obtained from institutional and other libraries. There include poor manpower, inadequate materials and equipment, poor quality of services rendered in the libraries, lack of awareness of importance of libraries and poor funding. Alegbeleye (1996) in his own contribution from the paper record management perspective also identified some constraint to meeting information needs. They include inadequate file classification inappropriate quality of paper and file covers which tend to deteriorate over time, mutilation and theft of government document, storage problem, absence of training for librarian and poor working condition of librarians.

What is clear from this literature is the shared conclusion that examining the influence of research on policy in developing countries like Nigeria requires not only a good understanding of the underlying political context, but also of the actors involved in the policy process, their belief systems and viewpoints, the types of linkages established across them, and the manner in which the knowledge products are generated, packaged and shared. Vested interests among a few powerful elite, corruption and external influences, also play a distinctive role in many countries (Juma and Clark 1995). The main difficulty is gaining a better understanding of the policy process itself, and how evidenced-based information can play a role in it.

The research-to-policy linkages in Nigeria have been generally described as weak (Olomola 2007). A few factors have been cited for the low uptake of research by Nigerian Policymakers. The first has to do with the lack of high-quality research. Despite having one of the largest numbers of policy research institutions and think tanks in Africa, Hansohm (2003) describe these as generally unreliable. This has been attributed to many years of military rule, bad governance, and high level of corruption, especially the period between the late 1980s and early 1990s when most research establishments suffered from low funding, decay of infrastructure, and a flight of highly qualified academics to western institutions (DFID, 2007). The latter-often referred to as "brain drain"- remains a critical challenge facing local research institutes in Nigeria. In 2000, for example, about 36.1 percent of migrants leaving Nigeria were tertiary educated and highly skilled (id21 insights, 2008). Many others find more prestigious work outside of research, working in the private sector or as practitioners for international development organizations, which offer better salaries and working conditions. All these aspects have contributes to low production and poor quality research out[put and services.

The second factor is the apparent disconnect between researchers and policymakers. According to Ogunlade (cited in Obadan and Ugu 2002), there is little interaction between policymakers and researchers. Thus, meaningful discussion of available research findings, their suitability to policy-related problems and identification of other policy areas requiring research attention is severely lacking. In some cases, policymakers do not have confidence in research findings probably due to doubtful methodology or the highly technical language used by researchers. Closely related is the problem of mutual suspicion between the researchers and the policymakers. Policymakers have often been alleged to hoard information needed for policy research, while researchers are being accused of abusing classified information divulged to them. The only aspect of linkage between research and policy is the dissemination of research findings, but most policymakers hardly attend dissemination seminars and workshops or they send their representatives with little or no caliber to contribute to policy debate (Olomola 2007).

The third factor can be viewed as the result of the first two (Obadan and Uga (2002) suggest that the insufficient utilization of available research-based information in public policymaking leads to disenchantment by policy researchers. In this context, policy researchers may redirect their efforts towards research that may not necessarily address social and development problems, but rather adds to their publications or contributes to an ongoing intellectual debate. Supporting their theory, in a recent study conducted to ascertain causes of poor research output among Nigerian academics. Egunyenga (2008) identified the lack of use of research findings by policy practitioners as most critical.

Dunn (1980) and Webber (1983) as cited by Porter and Hicks(1996) have a position that most research reports and policy analyses are often not written with the right client in mind, not timely and do not take into account political and administrative feasibility. They also identified differences in professional cultures as a substantial factor impeding communication between researchers and government functionaries.

On the other hand, Chandrika (2007) has shown that factors such as relevance of research findings, timeless, quality, accuracy, objectivity of research documentations and simplicity of language of research findings encourage to a great extent, the use of research reports by policy makers for decision making. Abdalla (2003) revealed that factors like cultural values, attitudes, traditionally oriented behavior, fear of ostracization, power relationships and vested interests may impinge on policy makers, causing them to stick to existing routines of actions rather than make informed decisions.

Materials and Methods

Survey research method was adopted in this study. According to Aina and Ajiferike (2002) survey research involves a systematic and comprehensive collection of information about opinions, attitudes, feelings, beliefs and behaviors of the people. The study surveyed the extent of availability and utilization of research and other information by senior civil servants in formulating policies in Nigeria. In survey research, since only the opinions of subjects were analyzed without any manipulation of independent variables. The target population are the policy making civil servants who are expected to be consumers of research and other form of information in formulating policies.

In the process of conducting this research, seven Ministries of Lagos State Government were sampled randomly for this study. They are Ministry of Economic Planning and Budget, Ministry of Education, Ministry of Agriculture and Cooperatives, Ministry of Commerce and industry, Ministry of Works and infrastructure, Ministry of Transportation and Ministry of Finance, all at Alausa, Ikeja Lagos state.

The target respondents for this study were policymakers or senior civil servants that belong to grade level 10 to 16 whose major role is to advise the political heads of ministries and parastatals on policy matters. The officers in these categories are director-generals, directors, assistant directors, chief-auditors, chief-accountants, head of departments, heads of sections and other senior staff members in the selected ministries in Lagos State. They were the most preferred respondents for this research, because

they are not directly involved in research although most of them would have been involved in some research far back in university or polytechnic or college of the education. All the senior civil servants from grade levels 10 to 16 in the ministries stated above formed the population of the study.

Table 1 Shows the population of civil servants that form the population of study in the selected Ministries

| Ministry | Grade level | | | |
|------------------------------|-------------|-------|-------|-------|
| | 10-12 | 13-14 | 15-16 | Total |
| Works and infrastructure | 17 | 9 | 7 | 33 |
| Finance | 7 | 4 | 6 | 17 |
| Transport | 5 | 9 | 6 | 20 |
| Commerce and industry | 17 | 6 | 10 | 33 |
| Education | 2 | 1 | 5 | 8 |
| Economic planning and budget | 15 | 12 | 5 | 32 |
| Agriculture | 11 | 6 | 6 | 23 |
| Total | 57 | 47 | 45 | 166 |

The sampling method adopted for this study was stratified sampling method which involves sampling from different cadres of civil servants in grade level 10 to 16. They are mostly head of departments, head of sections, accountants, and other higher cadre officers that are involve in policy making. However, random sampling was used to select from each of the different cadres and levels in the ministries in order to ensure that every respondent in different levels/cadres has equal chance of being selected for the study.

Table 2: List of senior civil servants in Grade level 10 to 16 in the selected Government Ministries in Lagos state

| S/N | Ministry | Number of Grade level 10-16 civil servants | |
|-----|------------------------------|--|----|
| 1 | Education | 3 | 30 |
| 2 | Economic Planning and Budget | 13 | 32 |
| 3 | Agriculture and cooperatives | 23 | 38 |
| 4 | Finance | 5 | 59 |
| 5 | Commerce and industry | 5 | 50 |
| 6 | Works and infrastructure | 45 | 50 |
| 7 | Transportation | 10 |)2 |
| 8 | Total | 106 | 51 |

Source: Administration unit of selected Ministries

A total number of Two hundred (200) copies of questionnaires were distributed to senior civil servants in grade level 10 to 16 in the selected ministries in Lagos state to fill while one hundred and sixty six (166) were returned completed and six (6) were uncompleted, which makes a total of one hundred and seventy two (172) were recovered and twenty eight (28) copies could not be recovered. 86 % of the instrument were retrieved and are to be used for the study.

To ensure validity and reliability of questionnaire, three processes was carried out, which are (i) pilot test (ii) face validity (iii) Cronbach's Alpha.

. A pilot test was carried out on twenty civil servants from the Ministry of Health in Oyo state. The instrument was revised to ensure clarity, appropriateness of language and expression to the appropriate respondents.

For the purpose of this study face validity was used. The researcher drafted the questionnaire based on the focus of the study and the questionnaire was given to the project supervisor for necessary criticisms and modification. His suggestions coupled with peer review were utilized in the final design of the questionnaire. This was done to ensure that the questions are appropriate and not leading to an answer. Lastly, cronbach's alpha was used to test the reliability and validity of the instrument.

Analysis was based on returned questionnaires. Responses from the questionnaire were coded, and the Statistical Package for Social Sciences (SPSS) was used for the analysis. To analyze the data, care was taken to ensure that the research objectives were met. At the first level of the analysis, descriptive statistics was used in analyzing the data collected. Frequency counts and percentages distributions were used to represent the data collected. In analyzing the data, T-test and ANOVA were used and was tested at 5% level of significance. Descriptive statistics were employed to present the demographic data of the respondents and ANOVA and t-test were used to test the research hypotheses.

Findings and Discussion

Socio-Demographic Characteristics of the Respondents

This section discusses the various socio-demographic variables of respondents. This is done using simple distribution's table as shown below.

The distribution of the sampled senior civil servants by demographic characteristics is presented in table 3. The results shows that 113 (68%) of the total respondents are males, while only 53 (32%) are females. The greatest proportion of the respondents 52 (31%) are aged between 40-44 years, while only 34 (20.5%) of the respondents were aged above 49 years.

From the result in table 3, it can be seen that the majority 85 (50.9%) of the sampled respondents are Master/PGD degree holders, followed by B.Sc. holders 52 (31.1%), HND holders 20 (12%) in that order. PhD and NCE holders were the least in the category 3 (1.8%) each. The reason for the relatively high number of respondents with master's degree and PGD holders could be due to the fact that the study targeted policy makers, most of who occupy top positions in their various ministries; and these position often expect at least a post graduate qualification for the occupants on appointment or as condition for the promotion to the positions. The reason for having few PhD holders could be that most of them in this category prefer to be in academics than working in the ministries.

Table 3 also reveals that ministries of Commerce, Economic Planning & Budget and Works contributed equally 33 (19.9%) to the sample. The figure for Ministries of Agriculture, Finance and Transportation are 22 (13%), 17 (10%) and 22 (12%) respectively. Ministry of education had the least number of respondents 8 (4.8%). Further analysis also shows that most of the respondents have spent over 10 years in service 131 (80.4%). There were also a lower proportion of respondents 32 (19.6%) who were between 0-10 years in service.

The greater part of the sampled population 42 (25.3%) were in grade level 10. Followed by those in grade level 12 and 13 with 33 (19.9%) and 30 (18.1%) respectively. Those in grade level 14 and 15(combined) had 34 (20.4%) while the least portion of the sample had 27 (16.4%).

Table 3: Socio-Demographic Characteristics of Respondents

| Characteristics | Frequency | Percentage |
|-----------------|-----------|------------|
| 1.Gender | | |
| Female | 53 | 31.9 |
| Male | 113 | 68.1 |

| Total | | 166 | 100.0 |
|----------------------------------|----|-----|-------|
| 2.Age | | | |
| Below 40 | | 39 | 23.5 |
| 40-44 | | 52 | 31.3 |
| 45-49 | | 41 | 24.7 |
| Above 49 | | 34 | 20.5 |
| Total | | 166 | 100.0 |
| 3.Highest Level of Education NCE | | | |
| HND | | 3 | 1.8 |
| Bsc | | 20 | 12.0 |
| Masters/PGD | 52 | 85 | 31.1 |
| PhD | | 3 | 50.9 |
| Others | | 4 | 1.8 |
| Total | | 166 | 2.4 |
| | | | 100.0 |
| 4.Ministry | | | |
| Agriculture | | 22 | 13.3 |
| Commerce | | 33 | 19.9 |
| Economic Planning and Budget | | 33 | 19.9 |
| Education | | 8 | 4.8 |
| Finance | | 17 | 10.2 |
| Transportation | | 20 | 12.0 |
| Works | | 33 | 19.9 |
| Total | | 166 | 100.0 |
| 5.Experience in Years | | | |
| 0-10years | | 32 | 19.6 |
| >10years | | 131 | 80.4 |
| Total | | 163 | 100.0 |
| 6.Grade Level | | | |
| GL 10 | | 42 | 25.3 |
| GL 12 | | 33 | 19.9 |
| GL 13 | | 30 | 18.1 |
| GL 14-15 | | 34 | 20.4 |
| GL 16 | | 27 | 16.3 |
| Total | | 166 | 100.0 |

Types of Research Information Used

This section discusses the sources of information used by policy makers. As shown in the table 4, some types of information considered to be highly utilized by the respondents for decision making included information on services being provided by one's ministry 140 (84.3%), followed by information on projects implemented in one's ministry 130 (78.8%), financial/budget information 118 (71.5%), information on human resources and skills available in the ministry 114 (68.3%), information on infrastructural development 113 (69.3%) and statistical information on Lagos State govt. activities 112 (67.9%).

Also, the majority of the respondents 113 (71.1%) are low users of statistical information on government activities of other states. This result could be connected to the limited accessibility to information on government activities in other states, as each state government tend to guard jealously its activities from others, particular other states being governed by opposing parties.

Table 4: Types of information used by sampled Respondents

| Type of Information Type of Information | Low | High |
|---|--------------|--------------|
| | Frequency(%) | Frequency(%) |
| Information on services being provided by your ministry | 26(15.7) | 140(84.3) |
| Information on projects being implemented one's ministry | 35(21.2) | 130(78.8) |
| Finance/Budget information | 47(28.5) | 118(71.5) |
| Information on human resources and skills available in the ministry | 53(31.7) | 114(68.3) |
| Information on infrastructural development | 50(30.7) | 113(69.3) |
| Statistical information on Lagos State govt. activities | 53 (32.1) | 112(67.9) |
| Info on assessment/evaluation of services by other ministries | 71(42.5) | 96(57.5) |
| Information on urban development | 74(44.9) | 91(55.1) |
| Assessment/evaluation of projects implemented by other | 80(48.2) | 86(51.8) |
| ministries | | |
| Statistical information on the national economy | 79(48.2) | 85(51.8) |
| Information on political issues | 75(47.5) | 83(52.5) |
| Information on social development matters | 87(52.4) | 79(47.6) |
| Information on rural development | 93(55.7) | 74(44.3) |
| Information on local security matters | 91(55.5) | 73(44.5) |
| Information on youth/children issues | 96(57.8) | 70(42.2) |
| Information on women issues | 98(59.0) | 68(41.0) |
| Information on legislative matters | 94(58.1) | 68(41.9) |
| Information on national security matters | 107(64.5) | 59(35.5) |
| Statistical info on government activities of other states | 113(71.1) | 46(28.9) |

Sources of Research Information

Table 5 reveals that the sources consulted most by the respondents are internal files and documents 138 (82.6%), academic books 135 (82.3%), colleagues or superior 135 (81.8%), newspapers 133 (81.6%), government publications and reports 130 (80.8%) and Internet 134 (80.2%). This may imply that these information sources are readily available to policy makers in their policymaking process.

Table 5: Distribution of Respondents by their Source of Research Information

| Sources | Yes Frequency(%) | No Frequency(%) |
|---|------------------|-----------------|
| Internal files and document | 138 (82.6) | 29 (17.4) |
| Academic Books | 135 (82.3) | 29 (17.7) |
| Colleagues or superior | 135 (81.8) | 30 (18.2) |
| Internet | 134 (80.2) | 33(19.8) |
| Newspaper | 133(81.6) | 30 (18.4) |
| Government publications, annual reports e.t.c | 130 (80.8) | 31 (19.3) |
| Academic journals | 119 (73.9) | 42 (26.1) |
| Research reports | 119 (72.1) | 46 (27.9) |
| Committee | 112 (69.1) | 50 (30.9) |
| Research Libraries | 104 (63.8) | 59 (36.2) |
| Indexes | 87 (56.9) | 66 (43.1) |
| Researchers in the universities /polytechnics | 85 (53.1) | 75 (46.9) |
| Researchers in research institutes | 78 (49.1) | 81 (50.9) |
| Students thesis and dissertations | 72 (45.6) | 86 (54.4) |

Frequency of Use of Information for Decision Making

The result, as indicated in the table below, shows that the most frequently used information sources by the respondents in policymaking decisions are internal files 129 (77.7%), followed by Internet

126 (76.4%), government publications 116 (70.3%) and colleagues or superior 107 (65.6%). The reason for this high frequency of use of these sources of information could be due to their ease of accessibility. Hence, the policymakers consult these sources of information more often than the others.

Table 6: Distribution of the Respondents based on the Frequency of Utilization of Research Information

| Information Sources | Often | Occasionally | Never before |
|---|--------------|--------------|--------------|
| | Frequency(%) | Frequency(%) | Frequency(%) |
| Internal files and document | 129 (77.7) | 32 (19.3) | 5 (3.0) |
| Internet | 126 (76.4) | 36 (21.8) | 3 (1.8) |
| Government publications, annual reports e.t.c | 116 (70.3) | 42 (25.5) | 7 (4.2) |
| Colleagues or superior | 107 (65.6) | 51 (31.3) | 5 (3.1) |
| Newspaper | 86 (51.8) | 73 (44.0) | 7 (4.2) |
| Research reports | 76 (46.6) | 79 (48.4) | 8 (5.0) |
| Academic Books | 69 (42.1) | 89 (54.3) | 6 (3.7) |
| Committee | 53 (34.6) | 78 (51.0) | 22 (14.4) |
| Academic journals | 50 (30.7) | 100 (61.3) | 13 (8.0) |
| Indexes | 48 (32.4) | 70 (47.3) | 30 (20.3) |
| Research Libraries | 35 (21.6) | 117 (72.2) | 10 (6.2) |
| Researchers in research institutes | 28 (17.4) | 110 (68.3) | 23 (14.3) |
| Researchers in the universities /polytechnics | 26 (16.2) | 119 (73.9) | 16 (9.9) |
| Students thesis and dissertations | 19 (12.2) | 91 (58.3) | 46 (29.5) |

Accessibility of Information Sources

The table 7 below reveals the accessibility of information sources as perceived by the policy makers. The sources considered to be most accessible are Internet 134 (81.7%), information from colleagues or superior 114 (72.6%), newspaper 115 (71.4%), internal files and document 115 (71.0%) and government publications and reports. The high accessibility of the aforementioned information sources probably explains the high frequency of use of these sources by the respondents in decision making as shown in the previous table (table 4.4).

Table7: Distribution of Respondents based on Accessibility of Information Sources

| Information Sources | Highly accessible | Moderately accessible | Not Accessible |
|--------------------------------------|-------------------|-----------------------|----------------|
| | Frequency(%) | Frequency(%) | Frequency(%) |
| Internet | 134 (81.7) | 20 (12.2) | 10 (6.1) |
| Newspaper | 115 (71.4) | 38 (23.6) | 8 (5.0) |
| Internal files and document | 115 (71.0) | 41 (25.3) | 6 (3.7) |
| Colleagues or superior | 114 (72.6) | 37 (23.6) | 6 (3.8) |
| Government publications, reports etc | 108 (68.0) | 45 (28.3) | 6 (3.8) |
| Committee | 90 (58.4) | 54 (35.1) | 10 (6.5) |
| Academic Books | 77 (49.4) | 74 (47.4) | 5 (3.2) |
| Academic journals | 77 (49.4) | 91 (58.3) | 5 (3.2) |
| Research reports | 60 (39.2) | 83 (54.3) | 10 (6.5) |
| Research Libraries | 47 (30.0) | 105 (66.9) | 5 (3.2) |
| Researchers in research institutes | 47 (32.2) | 91 (62.3) | 8 (5.5) |
| Indexes | 46 (34.9) | 71 (53.8) | 15 (11.3) |
| Students thesis and dissertations | 41 (27.3) | 87 (58.0) | 22 (14.7) |
| Researchers in tertiary institutions | 44 (31.2) | 90 (63.8) | 7 (5.0) |

Reliability of Research Information

Table 8 shows that the most reliable sources of information for decision making as identified by the respondents are internal files and document 122 (75.8%), government publications and reports 117 (73.1%), colleagues or superiors 115 (72.3%) and Internet 111 (68.9%). The respondents' choice of these information sources could be of theses information sources except the Internet is likely due to fact that, being internal sources, there is much internal scrutiny and authoritativeness, and thence lower risk in use, associated with them than the other mostly external sources. The high reliability accorded the Internet is very difficult to explain, as the Internet is known to contain much inaccurate or invalidated information. Could they be interpreting reliability of the Internet in terms of ease of 24/7 access to such information once one has the infrastructure? If this is true, then it is also possible that they interpreted reliability of the internal sources possibly in terms of ease of access.

Table 8: Distribution of Respondents by their Ranking of Information Sources Reliability

| Information Sources | Highly Reliable | Moderately Reliable | Not Reliable |
|--|-----------------|---------------------|--------------|
| | Frequency(%) | Frequency(%) | Frequency(%) |
| Internal files and document | 122 (75.8) | 32 (19.9) | 7 (4.3) |
| Government publications, reports e.t.c | 117 (73.1) | 33 (20.6) | 10 (6.3) |
| Colleagues or superior | 115 (72.3) | 37 (23.3) | 7 (4.4) |
| Internet | 111 (68.9) | 40 (24.8) | 10 (6.3) |
| Research Libraries | 104 (67.1) | 46 (29.7) | 5 (3.2) |
| Committee | 93 (62.4) | 50 (33.6) | 6 (4.0) |
| Research reports | 93 (61.6) | 53 (35.1) | 5 (3.3) |
| Academic journals | 91 (61.5) | 50 (33.8) | 7 (4.7) |
| Academic Books | 89 (57.1) | 59 (37.8) | 8 (5.1) |
| Researchers in research institutes | 84 (59.2) | 51 (35.9) | 7 (4.9) |
| Newspaper | 83 (52.9) | 69 (44.0) | 5 (3.1) |
| Researchers in tertiary institutions | 76 (54.7) | 56 (40.3) | 7 (5.0) |
| Indexes | 55 (42.6) | 63 (48.8) | 11 (8.6) |
| Students thesis and dissertations | 39 (27.9) | 89 (63.6) | 12 (8.5) |

Relevance of Information Sources

Table 9 below shows the frequency distribution of the relevance of information sources in the opinions of the respondents. The table below shows that, majority of the respondents 134 (82.2%) ranked information obtained from internal files and document to be the most relevant information source for policy making. Following these are colleagues or superiors, newspapers and committees. Published and academic sources of information, such as libraries, research reports, academic books and journals, are considered to be generally of lower relevance to their decision making. The perception of the high relevance of the Internet, among other sources of research information, by the respondents could be due to the fact that there are many sites on the internet which collectively provide related and useful results for different decision making scenarios, although a specific site or information on the Internet may not be very relevant.

Table 9: Distribution of Respondents by their Relevance Ranking of Information Sources

| Information Sources | Highly Relevant Frequency(%) | Moderately Relevant Frequency(%) | Not Relevant Frequency(%) |
|--|---------------------------------|-------------------------------------|------------------------------|
| Internal files and document | 134 (82.2) | 21 (12.8) | 8 (5.0) |
| Government publications, reports e.t.c | 126 (77.3) | 28 (17.2) | 9 (5.5) |
| Internet | 121 (74.2) | 31 (19.0) | 11 (6.8) |
| Colleagues or superior | 107 (67.3) | 46 (28.9) | 6 (3.8) |

| Committee | 97 (63.0) | 48 (31.2) | 9 (5.8) |
|--------------------------------------|-----------|-----------|----------|
| Research Libraries | 94 (60.3) | 56 (35.9) | 6 (3.8) |
| Newspaper | 94 (58.0) | 64 (39.5) | 4 (2.5) |
| Academic Books | 88 (57.1) | 59 (38.3) | 7 (4.6) |
| Research reports | 87 (55.1) | 67 (42.4) | 4 (2.5) |
| Academic journals | 85 (55.9) | 59 (38.8) | 8 (5.3) |
| Researchers in research institutes | 77 (53.1) | 60 (41.4) | 8 (5.5) |
| Researchers in tertiary institutions | 56 (39.4) | 77 (54.2) | 9 (6.4) |
| Indexes | 51 (38.6) | 71 (53.8) | 10 (7.6) |
| Students thesis and dissertations | 48 (33.6) | 84 (58.7) | 11 (7.7) |

4.1.8 Barriers to the Use of Research Information in Policy Making

Table 10 shows that, the major constraint to the use of research information is that most policy recommendations arising from research work are not politically feasible. This claim was made by 116 (70.3%) of the total respondents. Other major constraints to the use of research output are recommendations of research are often not financially feasible 106 (63.9%), too much information to absorb 102 (64.2%), information from different researchers is often contradictory 97 (61.4%) ,inadequate understanding between the policymakers and researchers 96 (58.9%) and inadequate ability to interpret quantitative/technical information 87 (54.4%). Quite a high number of the respondents 108 (66.3%) do not consider the quality of research information being unreliable as a challenge and more than 50% of the respondents do not perceive language used in presenting results, internet connection, and research delays and complications as constraints to research output. These findings suggest that the civil servants do not consider themselves incapable of understanding research output, which they also consider to be of adequate quality, but the major problem is either political factors that prevent the use of known research findings or the prohibitive or unaffordable costs of implementing optimal policies or projects recommended by the research.

In spite of the identified challenges to use of research output, policy makers still consult the aforementioned information sources. The only factor that could vary is the frequency of use of these sources with preference being given to the most accessible and reliable information source.

Table 10: Challenges of using Research Outputs

| Challenges of using Research Information Reaction of the Responde | | Respondents |
|---|------------|-------------|
| | Yes | No |
| Recommendations of research are often not politically feasible | 116 (70.3) | 49 (29.7) |
| Recommendations of research are often not financially feasible | 106 (63.9) | 60 (36.1) |
| Too much information to absorb | 102 (64.2) | 57 (35.8) |
| Information from different researchers is often contradictory | 97 (61.4) | 61 (38.6) |
| Inadequate understanding between the policymakers and researchers | 96 (58.9) | 67 (41.1) |
| Inadequate ability to interpret quantitative /technical information | 87 (54.4) | 73 (45.6) |
| Inability to access research information | 86 (57.0) | 65 (43.0) |
| I have little time to read research publications | 84 (50.9) | 81 (49.1) |
| Language of presentation of findings is often difficult to understand | 79 (48.2) | 85 (51.8) |
| Lack of ready connectivity to the internet | 79 (47.6) | 87 (52.4) |
| Research information often complicates and delays decision making | 70 (42.9) | 93 (57.1) |
| Quality of research information is often unreliable | 55 (33.7) | 108 (66.3) |

The pre-set level of significance for each test of hypothesis in this study is 0.05. Null hypothesis which is represented with H0 would assume that there is no relationship between the variables being compared together. On the other hand, alternate hypothesis represented with H1 would assume there is a significant relationship between the variables being considered. If the p-value (the significance of the test) is lesser than or equal to the pre-test level of significance (0.05), then the null hypothesis will be rejected and the alternate hypothesis will be accepted. If the p-value exceeds 0.05, then the null hypothesis will be accepted.

Results of Tests

Hypothesis 1:

H0: There is no relationship between diversity of types of research information and demographic variables

H1: There is relationship between diversity of types of research information and demographic variables

Table 11 An independent t-test and one way ANOVA comparing between diversity of types of research information and demographic variables

| Demographic | | | Diversity of | of types of | research ir | formatio | n | |
|------------------|--------|-----|--------------|-------------|-------------|----------|-------|----------|
| variables | Mean | N | SD | F | Df | T | p- | Decision |
| | | | | | | | value | |
| 1.Gender(t-test) | | | | | | | | |
| Male | 3.6917 | 339 | 0.63619 | 13.217 | 472 | 3.793 | 0.000 | Reject |
| Female | 3.4534 | 135 | 0.56671 | | 274.808 | 3.986 | | НО |
| 2. Experience(t- | | | | | | | | |
| test) | 3.6173 | 103 | 0.65556 | 0.075 | 470 | -0.351 | 0.726 | Accept |
| 0-10years | 3.6414 | 369 | 0.60716 | | | -0.336 | | H0 |
| >10years | | | | | | | | |
| 3.Educational | | | | | | | | |
| Level (ANOVA) | | | | | | | | |
| Between Groups | | | | 15.372 | 2 | | 0.000 | Reject |
| Within Groups | | | | | 475 | | | НО |
| Total | | | | | 477 | | | |

Table 11b Post-hoc table and statistical descriptive of diversity of types of research information and educational level

| Demographic variables | Diver | sity of type | s of resea | rch info | rmation | |
|-----------------------|-----------------|--------------|------------|----------|---------|---------|
| | Mean difference | Std | Sig | Mean | N | Sd |
| | I-J | error | | | | |
| I | | | | | | |
| J | 43421* | .08311 | .000 | 3.2930 | 83 | 0.62627 |
| NCE/HND/others | 38043 | .07676 | .000 | | | |
| Bsc | | | | | | |
| Msc/PhD | | | | | | |
| Bsc | .43421* | .08311 | .000 | 3.7272 | 147 | 0.59990 |
| NCE/HND/others | .05379 | .06301 | .695 | | | |
| Msc/PhD | | | | | | |

| Msc/PhD NCE/HND/others | .38043* 05379 | .07676 .06301 | .000 .695 | 3.6239 | 248 | 0.60144 |
|---------------------------|------------------|------------------|--------------|--------|-----|---------|
| Bsc | | | | | | |
| Total | | | | 3.6239 | 478 | 0.62330 |

The effect of gender on diversity of use of research information was tested using independent t-test. The result is presented in table 11 above. Table 11 shows that there is a significant difference between male and female respondents on diversity of research information (t = 3.793; df = 472; p < 0.05). The table also showed that males are more conversant with the diversity of types of information than the female respondents, with a mean difference of 0.2383. Therefore, the result does not support the null hypothesis. Hence, the alternate hypothesis is accepted.

The effect of respondents' years of experience on diversity of use of research information was also tested using independent t-test. The result is presented table 11 above. Table 11 shows that there is a no significant relationship between years of experience and diversity of research information (t=-0.351; df=470; p>0.05). The table also showed that, the mean difference between respondent with less than ten years working experience and those with over ten years is -0.0241. Therefore, the result did support the null hypothesis. Hence, it is accepted.

The effect of the respondents' educational level on diversity of use of research information was tested using One-Way ANOVA. The result is presented in table 11 above. Table 11 shows that there is significant effect of educational level on diversity of use of research information F(2,477=15.372; p<0.05). Table 4.9b showed that, there is a significant relationship between NCE/HND/others and B.Sc. holders, NCE/HND/others and M.Sc./ PhD . The result did not support the null hypothesis; hence the alternate hypothesis is accepted. It is therefore assumed that educational level has effect on diversity of use of research information.

Hypothesis 2:

H0: There is no relationship between perception of research information sources and demographic variables

H1: There is relationship between perception of research information sources and demographic variables

Table 12 An independent t-test and one way ANOVA comparing between perception of research information sources and demographic variables

| Demographic | | perception of research information sources | | | | | | | | |
|------------------|---------|--|--------|-------|---------|--------|-------------|----------|--|--|
| variables | Mean | N | SD | F | Df | T | p- value | Decision | | |
| 1.Gender(t-test) | | | | | | | | | | |
| Male | 33.7528 | 178 | 0.6361 | 3.587 | 238 | -1.144 | 0.254 | Accept | | |
| Female | 35.0968 | 62 | 9 | | 100.154 | -1.104 | | H0 | | |
| | | | 0.5667 | | | | | | | |
| | | | 1 | | | | | | | |
| 2. Experience(t- | | | | | | | | | | |
| test) | 35.2500 | 52 | 7.2972 | 2.123 | 235 | 1.040 | 0.300 | Accept | | |
| 0-10years | 33.9568 | 185 | 6 | | 89.366 | 1.102 | | H0 | | |
| >10years | | | 8.0897 | | | | | | | |
| - I | | | 3 | | | | | | | |

| 3.Educational | | | | | |
|----------------|--|--------|-----|-------|--------|
| Level (ANOVA) | | | | | |
| Between Groups | | 15.372 | 2 | 0.168 | Accept |
| Within Groups | | | 237 | | H0 |
| Total | | | 239 | | |

Table 12b Post-hoc table and statistical descriptive of perception of research information sources and educational level

| Demographic variables | perce | ption of res | earch in | formation | sources | |
|-----------------------|-----------------|--------------|----------|-----------|---------|---------|
| | Mean difference | Std | Sig | Mean | N | Sd |
| | I-J | error | | | | |
| I | | | | | | |
| J | -1.87069* | 1.83260 | .595 | 31.7500 | 24 | 7.77538 |
| NCE/HND/others | -3.11047 | 1.76692 | .215 | | | |
| Bsc | | | | | | |
| | | | | | | |
| Msc/PhD | | | | | | |
| | | | | | | |
| Bsc | 1.87069 | 1.83260 | .595 | 33.6207 | 87 | 7.97998 |
| NCE/HND/others | -1.23978 | 1.10267 | .532 | | | |
| | | | | | | |
| Msc/PhD | | | | | | |
| | | | | | | |
| | | | | | | |
| Msc/PhD | 3.11047* | 1.76692 | .215 | 34.8605 | 129 | 7.95765 |
| NCE/HND/others | 1.23978 | 1.10267 | .532 | | | |
| Bsc | | | | | | |
| | | | | | | |
| Total | | | | 34.1000 | 240 | 7.97475 |

The effect of gender on perception of research information was tested using independent t-test. The result is presented in table 12 above. Table 12 shows that there is no significant effect of gender on perception of research information (t=-1.144; df=238; p>0.05). The table also showed that, males have more perception to research information source than the female as the mean difference is 0.23825. This implies that the result did support the null hypothesis; hence it is accepted. It is therefore assumed that gender has no effect on perception of research information.

The effect of respondents' years of experience on perception of research information was also tested using independent t- test. The result is presented table 12 above. Table 12 shows that there is no significant relationship between years of experience and perception of research information (t=1.040; df=104; p>0.05). The table also showed that respondents with working experience between 0 and 10 years are more than those with over 10years experience with a mean difference of -0.02415. Therefore, the result did support the null hypothesis. Hence, it is accepted.

The effect of educational level on perception of research information sources was tested using One-Way ANOVA. The result is also presented in table 12 above. Table 12 shows that there is no significant effect of educational level on perception of research information $F(2,239=1.798;\ p>0.05)$. The result did support the null hypothesis; hence it is accepted. It is therefore assumed that educational level has no effect on perception of research information sources.

Hypothesis 3:

H0: There is no relationship between frequency of use of research information sources and demographic variables

H1: There is relationship between frequency of use of research information sources and demographic variables

Table 13 An independent t-test and one way ANOVA comparing between frequency of use of research information and demographic variables

| Demographic | | | Frequency | y of use of | research in | formatio | n | |
|------------------|--------|-----|-----------|-------------|-------------|----------|-------|----------|
| variables | Mean | N | SD | F | Df | T | р- | Decision |
| | | | | | | | value | |
| 1.Gender(t-test) | | | | | | | | |
| Male | 3.4075 | 326 | 0.75618 | 1.552 | 482 | 3.793 | 0.754 | Accept |
| Female | 3.3852 | 158 | 0.69444 | | 335.733 | 3.986 | | H0 |
| 2. Experience(t- | | | | | | | | |
| test) | 3.3188 | 95 | 0.62216 | 0.312 | 477 | -1.335 | 0.182 | Accept |
| 0-10years | 3.4312 | 384 | 0.75962 | | 170.428 | -1.505 | | Н0 |
| >10years | | | | | | | | |
| 3.Educational | | | | | | | | |
| Level (ANOVA) | | | | | | | | |
| Between Groups | | | | 4.534 | 2 | | 0.011 | Reject |
| Within Groups | | | | | 485 | | | H0 |
| Total | | | | | 487 | | | |

Table 13b Post-hoc table and statistical descriptive of use of frequency of research information sources and educational level

| Demographic variables | Frequ | ency of use | of resea | rch infor | mation s | sources |
|-----------------------|-----------------|-------------|----------|-----------|----------|---------|
| | Mean difference | Std | Sig | Mean | N | Sd |
| | I-J | error | | | | |
| I | | | | | | |
| J | 26081* | 0.10396 | .044 | 3.1654 | 73 | 0.47558 |
| NCE/HND/others | 28523 | 0.0914 | .013 | | | |
| Bsc | | | | | | |
| | | | | | | |
| Msc/PhD | | | | | | |
| | | | | | | |
| Bsc | .26081 | .10396 | .044 | 3.4262 | 149 | .56770 |
| NCE/HND/others | 02442 | .07446 | .948 | | | |
| | | | | | | |
| Msc/PhD | | | | | | |
| | | | | | | |
| Msc/PhD | .28523* | 0.09614 | .013 | 3.4506 | 266 | .85301 |
| NCE/HND/others | 0.02442 | 0.07446 | .948 | | | |
| Bsc | | | | | | |
| | | | | | | |
| Total | | | | 3.4005 | 488 | 0.73292 |

The effect of gender on frequency of use of research information sources was tested using independent t-test. The result is presented in table 13 above. Table 13 shows that there is no significant effect of gender on frequency of use of research information (t=0.313; df=482; p>0.05). The table also

showed that males are more frequent in the use of information sources than the females with the mean difference of 0.23825. This implies that the result did support the null hypothesis; hence it is accepted. It is therefore assumed that gender has no effect on perception of research information.

The effect of respondents' years of experience on frequency of use of research information sources was also tested using independent t- test. The result is presented table 13 above. The table shows that there is no significant relationship between years of experience and frequency of use of research information (t=-1.335; df=477; p>0.05). The table also showed that respondents with over 10years working experience are more than those between 0 and 10years with mean difference of -0.11238. Therefore, the result did support the null hypothesis. Hence, it is accepted.

The effect of educational level on frequency of use of research information was tested using One-Way ANOVA. The result is presented in table 13 above. Table 13 shows that there is significant effect of educational level on frequency of use of research information F(2,487=4.534; p<0.05). The table also showed that, there is a significant relationship between NCE/HND/others and B.Sc. holders, NCE/HND/others and M.Sc./PhD. The result did not support the null hypothesis; hence alternate hypothesis is accepted. It is therefore assumed that educational level has an effect on frequency of use of research information.

Hypothesis 4:

H0: There is no relationship between perception of the qualities of different Information sources and demographic variables.

H1: There is relationship between perception of the qualities of different Information sources and demographic variables.

Table 14 An independent t-test and one way ANOVA comparing between perception of the qualities of different Information sources and demographic variables

| Demographic | | Percep | tion of qu | alities of di | ifferent in | formatio | n sources | |
|------------------|--------|--------|------------|---------------|-------------|----------|-------------|----------|
| variables | Mean | N | SD | F | Df | T | p- value | Decision |
| 1.Gender(t-test) | | | | | | | | |
| Male | 3.5956 | 204 | 0.48429 | 0.071 | 315 | -2.202 | 0.028 | Reject |
| Female | 3.7181 | 113 | 0.45500 | | 243.719 | -2.242 | | НО |
| 2. Experience(t- | | | | | | | | |
| test) | 3.6968 | 204 | 0.48429 | 0.341 | 135 | -0.351 | 0.339 | Accept |
| 0-10years | 3.6360 | 113 | 0.45500 | | 109.175 | -0.336 | | H0 |
| >10years | | | | | | | | |
| 3.Educational | | | | | | | | |
| Level (ANOVA) | | | | | | | | |
| Between Groups | | | | 6.299 | 2 | | 0.002 | Reject |
| Within Groups | | | | | 314 | | | H0 |
| Total | | | | | 316 | | | |

Table 14b Post-hoc table and statistical descriptives of perception of qualities of different information sources and educational level

| Demographic variables | Perception of qualities of different information sources | | | | | | | | |
|-----------------------|--|---------|------|--------|----|---------|--|--|--|
| | Mean difference | Std | Sig | Mean | N | Sd | | | |
| | I-J | error | | | | | | | |
| I | | | | | | | | | |
| J | 16491 [*] | 0.07443 | .088 | 3.4660 | 61 | 0.31091 | | | |

| NCE/HND/others | 25436 | 0.07182 | .002 | | | |
|----------------|---------|---------|------|--------|-----|---------|
| Bsc | | | | | | |
| | | | | | | |
| Msc/PhD | | | | | | |
| | | | | | | |
| Bsc | .16491 | .07443 | .088 | 3.6310 | 114 | .61704 |
| NCE/HND/others | 25436 | .07182 | .318 | | | |
| | | | | | | |
| Msc/PhD | | | | | | |
| | | | | | | |
| Msc/PhD | .25436* | 0.07182 | .002 | 3.7204 | 142 | .37936 |
| NCE/HND/others | 0.08945 | 0.05900 | .318 | | | |
| Bsc | | | | | | |
| | | | | | | |
| Total | | | | 3.6393 | 317 | 0.47696 |

The effect of gender on perception of the qualities of different information sources was tested using independent t-test. The result is presented in table 14 above. Table 14 shows that there is a significant effect of gender on perception of the qualities of different information sources (t=-2.202; df=315; p<0.05). This implies that the result did not support the null hypothesis. Hence, the alternate hypothesis is accepted. It is therefore assumed that gender has an effect on perception of the qualities of different information sources.

The effect of respondents' years of experience on perception of the qualities of different information sources was tested using independent t-test. The result is presented in table 14 above. Table 14 shows that there is no significant relationship between years of experience and perception of the qualities of different information sources (t=0.958; df=135; p>0.05). Therefore, the result did support the null hypothesis. Hence, it is accepted.

The effect of the respondents' educational level on perception of qualities of different information sources was tested using One-Way ANOVA. The result is presented in table 14 above. Table 14 shows that there is significant effect of educational level on perception of the qualities of different information sources F (2,316=6.299; p<0.05). Table 4.12b showed that there is a significant relationship between NCE/HND/others and M.Sc./PhD holders. The result did not support the null hypothesis; hence alternate hypothesis is accepted. It is therefore assumed that educational level has an effect on perception of research information.

Implication of Research Findings

The study revealed that the major sources of research information are internal files and document, colleagues or superior, newspapers, academic books, academic journals, research reports, internet, committee, government publications and annual reports. This finding agrees with (Anyanwu et al, 2011) who revealed that high quality information can be derived from the following sources expert knowledge: in-house memoranda (internal files), government publications, newspapers/popular magazine and personal contact with the professionals, who could provide the information the policy makers needed in government establishments, in order words the policy makers went to professionals civil servants and those in private sector who could provide the information they needed.

The study also conform with (Aiyepeku, 1989, and Tiamiyu, 1991) views that newspaper, magazines, learned journals, books, monographs, in-house memoranda, (files), conference proceedings, bulletin form the private sector, government publications, consultancy reports and feasibility reports are among the sources of information required by policymakers in making policies.

Further analysis also shows that information on services being provided by one's ministry 140 (84.3%) information on projects implemented in one's ministry 130 (78.8%), financial/budget information 118 (71.5%), information on human resources and skills available in the ministry 114 (68.3%), information on infrastructural development 113 (69.3%) and statistical information on Lagos State government activities 112 (67.9%) are the types of research information mostly used by policymakers in Lagos state.

This study agrees with Tiamiyu (1991) position that information needs can also be viewed by identifying work activities carried out by civil servants. These work activities included evaluating project proposal, publishing information on projects, implementing and inspecting projects writing reports on public policy issues, summarizing reports, gathering statistical information/data, carrying out general administrative duties and providing direct public services among others. Tiamiyu (1991) further stated that civil servants usually need statistical information, directory information, procedural information and general administrative information. This result also confirms Ehikhamenor (2002) submission that a considerable portion of the information needed in the public services comes from government services.

The study revealed that majority of the respondents use internal files, internet and government publications more often for decision making. The figures representing the above description are approximately 129 (77.7%), 126 (76.4%) and 116 (70.3%) respectively. The reason for this high frequency of use of these sources of information could be due to their ease of accessibility. The least consulted information sources are student thesis and dissertation 19 (12.2%), researchers in research institutes 28 (17.4%) and researchers in tertiary institutions 26 (16.2%). This relates to the findings of an earlier study by Glover (2000) who showed that university research is often unsuitable for use by policy makers. According to him, this is so because academics tend to search for general laws and patterns of behavior that reveal long run importance than highly specific observations and also adding that university research takes longer time to produce results for a policy maker with deadlines.

The study also shows that the most accessible information sources in order of reachability are Internet 134 (81.7%), information from colleagues or superior 114 (72.6%), newspaper 115 (71.4%) and internal files and document 115 (71.0%). As earlier mentioned, the reason for the high perception of internet services as highly accessible could be due to the fact that, most of the ministries in Lagos state have internet facilities where the staff members have easy access to the internet. Also the ranking of colleagues or superior and internal files as highly accessible is apparent due to the proximity of these sources to policy makers than any of the other sources. After all, they are located in the same working environment with the policy makers; the internal files and document could just be a shelve away while the colleagues or superiors could be a step or an office away. Sources that are highly accessible are more frequently consulted than those with moderate accessibility. The most inaccessible information sources are student thesis 41 (27.3%), indexes 46 (34.9%) and research reports 60 (39.2%). Of the three, student thesis and dissertations are the least accessible and the reason for this could be due to the lack of proper monitoring and organization of student thesis in some tertiary institutions.

The major constraint to the use of research information as revealed by the study are: most policy recommendations arising from research work are not politically feasible 116 (70.3%), too much information to absorb 102 (64.2%) and financial impracticability of the recommendations 106 (63.9%) which corroborated with Dunn (1980) and Webber (1983) 's position as cited by Porter and Hicks (1996) that most research reports and policy analyses are often not written with the right client in mind, not timely and do not take into account political and administrative feasibility.

Other challenges revealed from the study are: information from different researchers are often contradictory 97 (61.4%), interpretation of quantitative or technical information 87 (54.4%), inadequate understanding of the connection between the policy makers and the researchers 96 (58.9%), and limited time for reading research publications 84 (50.9%). This result also agrees with Ogunlade's position (cited

in Obadan and Ugu 2002),that there is little interaction between policymakers and researchers. Thus, meaningful discussion of available research findings, their suitability to policy-related problems and identification of other policy areas requiring research attention is severely lacking. In some cases, policymakers do not have confidence in research findings probably due to doubtful methodology or the highly technical language used by researchers.

Findings of this study has shown that policymakers makes use of different types of research information sources in making policy, despite the challenges encountered in the course of carrying out their duties. The study showed that of all the demographic attributes considered, gender and educational level have significant effect on the type of research information use for policy making. Men explore more than women in making use of the types of research information in making policy. Men tend to try new types of information sources different from what they are used to, unlike most women that are complacent with their usual type of information. Those with higher academic qualification explore different types of information more than the others. This may be due to the fact that, civil servants with higher educational qualification are well read and are faced with more challenges, because the higher you go, the tougher it becomes and this will prompt them to explore more research information in their quest for knowledge than those with lower educational level.

The study showed that of all the demographic variables considered for the study, educational level only, have a significant effect on the frequency of use of research information sources. The study showed that civil servants with higher educational qualification frequently consult research information sources than those with lower educational qualification. This can be attributed to the fact that those with higher educational level are faced with more challenges; they are prompted to spend more time to study and use research information more often than their counterparts with lower educational level.

Finally, the study showed that gender and educational level are the demographic attributes that have a significant effect on the perception of qualities of the research information sources. Men are more particular about the quality of research information than the women. They take their time to scrutinize the authenticity of an information source unlike most women who are less bordered. Civil servants with higher educational qualification are more concerned with the quality of research information in making policy. Highly educated civil servants tend to consider the quality of research information source before adopting them in solving any challenge in making policy than those with lower educational level.

Conclusion and Recommendations

The study has shown that, policymakers consult mostly the following sources of research information for policy making: internal files and document, academic books, colleagues or superior, newspaper, government publications & reports and internet. The type of research information used in policy making included information on services being provided by ones ministry, information on projects implemented in one's ministry, information on infrastructural development, information on human resources and skills available in the ministry and statistical information on Lagos state government activities. Policymakers did not explore all the types of information sources available to them because of their perceptions of the inadequate accessibility and reliability of some sources, which are critical factors that affect their attitude to their adoption.

Based on the findings of this study, it is recommended that policymakers should consider using a wider range of research information sources in order to ensure more effective policy making. In order to achieve this, policymakers themselves should intensify their own efforts in making intensive use of research information in their policy making process. The government can also boost the use of research by making specific policy-oriented research grants available to researchers in the universities/polytechnics and research institutes in order to produce research output which can be useful to policymakers in making policies. Training on benefits of research information and how to access and use them should be provided periodically to assist policy makers to improve in their policy making duties.

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