Teachers' Research Undertaking in Higher Education: Perils and Promises to Success in Research Productivity

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## Abstract

The purpose of the study was to identify the extent of staff involvement in research, to underline the nature of communication among the existing staff through research (academic and administrative), and mark the extent to which research serves the transformative vision vested in the Ethiopian universities, in line with the higher education proclamation 650/2009. A descriptive survey design was used in the research since the study focused on status analysis regarding research productivity. For the materialization of the research, data were collected from teachers and top administrative officials who were concerned with research matters. The findings denoted that, though the staff had enormous research skills and considerably long years of services, they did not produce research owing, largely, to lack of initiative at institutional level, heavy task-load to some extent, and lack of good incentives and initiation to the most. The research is expected to be significant for teachers and students in higher educational institutions in Ethiopia as it embarks upon the productivity of research as a innovative means. It also marks the way research resources must be utilized other than the ceremonial undertaking most institutions hold. So, it underlines the concern behind use of research resources to come up with fertile findings which an bring about workable achievements.

Keywords: Personal, Institutional, Determinants, Research Productivity, Higher Education

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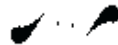
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Introduction

Background of the Research

Higher education institutions are centres of academia, research and community services. While academia and social services can be dealt with on the bases of clearly set and directly implemented plans and performance strategies, research needs special attention since it needs to be based on objective data, responsible handling and wise use of results (Lertputtarak, 2008). The Higher Education Proclamation of Federal Democratic Republic of Ethiopia (2009), in its deliberations of the objectives of higher education (Article 4:2-3), briefs also that, higher education institutions need to promote and enhance research focusing on knowledge and technology-transfer consistent with the country's priority needs. The five-year (2011/12-2015/16) strategic plan of Adama Science and Technology University stipulates the need to promote research through the engagement of the staff, students and partners, and disseminate the findings to end-users through seminars, publications and other appropriate means.

From the above proclamation and preset strategic destinies, universities need to undertake research with the involvement in-depth of key stakeholders. In that, besides being based on correct formats and data which guide valid interpretation, research must have application aspects related with social, economic and ideological breakthrough to accelerate the race to achieve growth and transformation. Such an application may, in turn, be internal and/or external; meaning that, it either enriches institutional self-fulfilment or outreach provisions. The above premise also goes with Gibb's (2009) assertion that states the following: "All countries have had to review and reorganise their capacities to access and benefit from the high-level knowledge that today shapes social change." By implication, this idea underlines the necessity to enrich research if academic development is to prove true.

In spite of the burning need to use research as the pillar for academic and social progress, there are certain determinants seeking uttermost attention when undertaking research for development. The determinants could be individual or institutional; they could also be related to leadership situation. Hence, this research looked into determinants of research productivity in higher education in higher education in order to improve performances [academic and administrative], based on objectively studied findings.

To Operationalizing, the very concept "research productivity" is presented as indicator of research works produced in a certain context (Abramo & D'Angelo, 2014). In that, the degree to which researches are held, the value of research as a pillar for innovation and change [in academia and further research], and the cross-disciplinary and cross-institutional exchange realms [with schools, the community and industry] were assessed. The rationale behind such a study is that, a university cannot stand as an-all-providing and omnipotent body without giving-and-taking, and making its footings on the reality of changes in the society, since education is a means; not an end in itself.

Ethiopian higher educational institutions are working towards achieving productivity and excellence in research as they state in their strategic directions. They do so for the longstanding aim of developing productivity through research by working on technology adaptation as their goal (Bahrdar University, 2014). Such an adaptation can have both physical prototype and mental.

The study dealt with individual determinants (one of the independent variables) in terms of research skills and commitment, workload, and scholarly exchanges at national and international levels. Institutional determinants (the other independent variable) also included identification and communication of thematic areas, arrangement and disposal of facilities and logistics, and organization for publication and dispensation of results. In the research, both production and dissemination were looked into as the process factors leading to research productivity, which was looked into as the dependent variables.

Both individual and institutional variables were interconnected by a two-way arrow denoting the interplay between the two variables. There is also a two-way arrow interconnecting research production and dissemination. Whereas individual determinants are interconnected with production, the institutional determinant is interconnected with dissemination condition. Research productivity, as the dependent variable, is interconnected with production and dissemination condition.

Theoretical Framework of the Research

Basics of Research and Research Productivity

Basics of Research

Research is defined differently by different scholars. Since the aim of this study is to demystify determinants of the effectiveness of research in higher education in terms of staff participation and application of major findings, reference is made to definitions of practical nature. There is conviction that, research in higher education has very wide implications and practical dimensions.

According to Goodall, McDowell and Singell (2014), research comprises of creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of people, cultures and societies, and the use of this stock of knowledge to devise new applications. Research aims at producing new and better goods and services and developing new and better ways of offering or distributing them. It also results in efficient use of present resources and waste products.

Research Productivity

Meek, Teichler and Kearney (2009:14), for instance, state the place of research in international development as follows:

Demand for research is rising across vastly different political, socio-economic and cultural contexts, each with their own capacity to respond. It has also given new importance to national knowledge-oriented institutions, and often necessitates urgent efforts to renew systems and structures of higher education in order that countries take their place in knowledge-based55 societies which are both competitive and volatile.

From the above assertion, it could be made plain that though research has wider publicity, each nation takes its own pace and strategic scheme to make use of. To take stand for the use of research findings, renewal of higher education systems and structures is also inevitable; in that, there are consistent competitions and conditions of being volatile in the process.

Volatility, in this accord, signifies the inevitability of getting out of the cascades of rigid routines and policy bottlenecks, and working for diverge and developmental findings. For such progressive actions to be realized, knowledge should, first, be developed on the pace of development-oriented policies and be aligned with good practices in order to be communicated to the vast array of users.

Kotrlik et al (2002) underline research productivity to be one of the most highly valued aspects of a faculty member's careers, especially when university promotion and tenure, faculty evaluation, and university goals are considered. Bay and Clerigo (2009) state also that, research in higher education has as vast roles as the institute itself with wider and much inevitable demands on the part of academia and society.

Hine (2013) relates the importance of research to human resource development through critical inquiries focusing on the actualization of the quantity and quality of such a resource. Vessuri (2008) asserts also that, with the rising demand for changes and responses to the challenges of

globalization, societies all over the world need to use workable researches which go far beyond formats and orthodox theories.

Factors Affecting Research Productivity in Higher Education

Alongside the relevance of research in higher education, there are certain factors having attributes on its effectiveness. Dundar and Lewis (1998), for instance, assert individual and institutional factors to have attributes on the research productivity. To elaborate, individual factors enclose innate ability and personal environmental influences such as quality and culture of graduates' training and culture of employing department. Abu-Zidan and Risk (2005) underline certain factors which stand as determinants on research productivity in developing countries such being lack of research education and training, lack of research appreciation (valuing), shortage of funding and resources, lack of ethics and standards , limited access to informatics, individualism and inability to work within groups.

Lertputtarak (2008), in the research on low research productivity of academic lecturers in a public university in Thailand, identified five factors which have determinant effects such being environmental, institutional, personal career development factors , social contingency factors, and demographic factors.

Iqbal and Mahmood (2011) and Okiki (2013), in their research factors related to low research productivity at higher education level, came up with findings which affected research productivity such being extra teaching load, performance of administrative duties along with academic duties, lack of funds, non-existence of research leave, and negative attitude of the faculty staff towards research, lack of research skills, non-existence of latest books, absence of professionals journals and less number of university own journals. Bland, et al (2005) and McGill and Seatle (2012) assert also that, individual, institutional and leadership predict faculty research productivity details of which relate to existence of research orientation, highest terminal degree, early publication habits, and communication with colleagues, journal subscriptions, and allotment of sufficient time for research.

There are also institutional and departmental attributes pertaining to structure and leadership, size of program and faculty, amount of university revenues, availability of technology and computing facilities, and number of books and journals in the library. Departmental culture with respect to working policies, availability of leaves, funds and travel for research, number supportive staff, and availability of government and non-government research fund is also the other determinant.

Gonzalez-Brambila and Veloso (2005) earmark also that, being able to estimate expected productivity of researches, taking into account individual characteristics, past history, and institutional variables can help design policies to enhance productivity, or can plan for a balance in groups to compensate for the potential existence of age, cohort or other effects. Kotrlik et al (2002) assert also that, number of publications, the extent of higher level advisory services and institutional supports in the faculty environment such as giving time for faculty-based research are very important for research productivity among others . Jung (2012) examined faculty research productivity in Hong Kong academics, and came up with the finding that, research productivity was influenced by factors such as including personal characteristics, workload, differences in research styles, and institutional characteristics .

To wind up the overview, determinants of research productivity in higher education are related to individual attributes of the researcher, institutional organization of the faculties and resource centres underlying the university.

Method

Research Design

This research dealt with the productivity of research in higher education by taking Adama Science and Technology University (ASTU) as a target focus of attention. The descriptive survey design of cross-sectional form was used to help the researcher to look into determinants of research   in higher education by taking Adama Science and Technology as an exemplum with its overall standards, focus, and communication system. Being descriptive, the research was also based on quantitative data to the largest extent with selectively lesser qualitative assertions.

Participants

Data were collected from selected teachers of different academic standards in the form of experiential self-report. Stratified random sampling was used to select respondents from the diverse staff members of the schools of engineering, humanities and law and education where 30 teachers had parts. Reference was also made to purposely selected officials who were concerned about research coordination in the university. Instruments of data collection were open-ended questionnaire items and semi-structured interview. For objective treatment of data, focus was also be made on experiences and activities done at the respective levels.

Procedures

Techniques of data collection were such that, first questionnaire were prepared, edited for possible errors and then distributed to the concerned sites. Upon distribution, due orientation was given for respondents to give responses as much objectively as possible. Then, interview consent was formed with the purposively selected group, and interview data were collected. The collected data was finally analyzed, and interpretations were given with the support of statistical and interpretive techniques based on which summary of major findings, conclusions and important recommendations were given.

Results

Individual Determinants on Holding Research

Under this part of the presentation, data related to individual determinants of research were looked into. These included research skills, number of publications across levels, and terminal visits and presentations at national and international levels.

Respondents' Experience

Table 1. Respondents' Overall work Experiences in years

Work Experience	Frequency	Percent	Valid Percent	Cumulative Percent
One To Five	5	16.1	16.1	16.1
Six To Ten	7	22.6	22.6	38.7
Eleven To Fifteen	10	32.3	32.3	71.0
Sixteen To Twenty	2	6.5	6.5	77.4
Twenty-One And Above	7	22.6	22.6	100.0
Total	31	100.0	100.0	

As indicated in table 4.2.1, 10 of the respondents (32.3%) were in the range of 11 to 15 years of

experience, and 7 (22.6%) of them had work experience of six to ten years. An equal number of respondents (7, 22.6%) also had the experience range above 21 years, and 5 (16.1%) had work experience of one to five years. The least number of respondents was in the range of services between sixteen and twenty (2, 6.5%). The point in view was that, though years of stay in an institute may not represent rich dose of experience, experience gained over time enhances the knowledge, skills and productivity of workers (Rice, 2010; Jensen,2009). So, it was justifiable to base the research experientially on the stated sample population with relative non-generalizability owing to range of data in place.

Staff In-service Research

Table 2. Have you held any in-service research since you got graduated?

Response Option		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	3.3	3.3	3.3
	Yes	21	70.0	70.0	73.3
	No.	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

As indicated in Table 4.2, majority of the respondents (21, 70%) affirmed their holding research. Only 8 (26.7%) of the respondents denoted not doing any in-service research. One respondent (3.3%) abstained; that is, s/he did not give any response.

From the data presented above, most of the sample teachers had research experiences. But from the related data on the number of research works made at the different levels of study, it became true that,   researches were very less at Bachelor's Degree level and after PhD. That means, most of the researches were held after holding MA. Hine (2013) states that, on-the-job research is the pathway for extensive promotion in teaching and professional development which has the collective effect of bringing progress to the entire staff as well as individual practitioners. In line with the above data, the cited source indicates the need to hold research at every level, but the reality in the research condition above was contrary to the literature.

Mizell (2010), underlining the importance of professional development for individual and institutional progress, earmarks that, the high rate of investment in research and other forms of staff capacity enhancement is worth its cost since it effects in due changes in activities and procedures followed.

Research across Levels

Table 3. How many researchers have you held across levels you have attained?

Response Options		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	9	30	30	30.0
	BA	3	10.0	10.0	40.0
	MA	16	53.3	53.3	93.3
	PHD	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

While most of the staff denoted their doing research as indicated under Table 4.2, the number of research works held across levels indicates that, most of the researches were held at MA /M Sc. levels (53.3%). Whereas 4 respondents (6.7%) indicated their doing research after PhD level, 3 of the respondents (10%) indicated their doing research at BA/BSc. Level. The implication is that, at the two extreme levels, the rate of research was very low. Experience-wise, there was no any definite concordance between years of service and number of researches held as well.

Identification of Thematic Areas

Table 4. Access to institutional research thematic areas for your research

Response Options		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	16.7	16.7	16.7
	No.	13	43.3	43.3	60.0
	I am not sure.	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Regarding institutional contribution to identify research thematic areas, most of the respondents denoted that they did not get any institutional notification (13, 43.3%), whereas 12 (40%) indicated their lack of surety, and 5 (16.7%) denoted their getting in touch with research thematic areas. From the data, it could be inferred, therefore, that the staff did have similar cognizance of the research thematic areas announced in the university.

Staff Perception of their Research Skill

Table 5. Respondents' Reactions about their Research Skills

Response Option		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rich	20	66.7	66.7	66.7
	Poor	10	33.3	33.3	100.0
	Total	30	100.0	100.0	

The other point of concern to which responses were sought on the part of sample teachers was their perceptions of individual research skill to which 20 (66.7%) denoted having very rich skill, whereas 10 (33.3%) denoted their not having so. From the data and subsequent reflection, it could be noted that, the sample teachers' research skills were variant in a sense that, they did not have equal standards of skills in holding research.

Rice (2010) stresses factors such as teaching skills, professional characteristics and classroom climate to be essential for teacher development and institutional progress. Such progresses cannot just happen; rather they need to be cultivated through practice. So, the teachers' research skill perception was an essential part of the issue in question, perhaps found to be in a good state as denoted in most of the responses given. However, there was also a noticeable gap in skills which could be made up through training. Besides the teachers' individual traits, institutional determinants of research were also looked into as under:

Institutional Factors

In researching institutional determinants of research productivity, a checklist with 10 points and three response options was administered to the teachers. Parallel to the teachers' reactions, top-officials' reflections on the different provisions were looked into. Then, overall implications were given to both the teachers' and officers' responses as stated in the line below:

Institutional Allotment of Research Budget

Table 6. The Institute Allots Me Sufficient Financial Support

Response options	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	6	20.0	20.0	20.0
Disagree	22	73.3	73.3	93.3
I am not sure to agree or disagree.	2	6.7	6.7	100.0
Total	30	100.0	100.0	

From the data presented in table 11, it is evident that, the responses on institutional financial support were not with strong base. This is manifest in line with the respondents' reactions where only 6(19.4%) affirmed their getting sufficient financial support; 2 (6.6%) indicated their not being so sure about even the very existence of support, and, the majority (22, 71%) affirmed their never getting any support. It still remains a question whether researchers' failure to get financial support is their own lack of readiness as the institute requests to entertain or the institute's stringency, though.

Contrary to the above, data from top officials collected through semi-structured interview indicated the following:

As far as research works appeared with valid proposals, the university has full potential to support. But, what seeks due attention, in the first place, is the nature of proposed research. Some of the proposed works do not look like a research since they never follow the proper format. Other are proposed too ambitiously and fail to see a good end (P1, May 26, 2015).

From the qualitative data presented above, it is evident that, the proposed researches lacked due methodological format and feasibility effect in meeting the demands of the proposed work and satiating the overall institutional need.

It could be ascertained further that, there was a very wide gap between how teachers perceived their experiences and the institutional expectation. The other aspect of the research pitfall was on too much ambition borne by practitioners where plan and disposal did not match. Regarding this, in their study on institutional research productivity, David (2014) asserts that, staff qualification [research experience] affects the research output.

Yet, as indicated in the response given to personal experience in holding research, majority of the respondents indicated their having rich experience in research. The gap could, then, be between what the practitioners ascertain to be rich and what the institution consider insufficient.

Arrangement of per diem and Incentives

Table 7. The Institutional Arrangements for Timely Handling of Research

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	5	16.66	16.6	16.6
Disagree	23	76.67	76.67	93.5
I am not sure.	2	6.67	6.6	100.0
Total	30	100.0	100.0	

Besides allotting grant money for research work, there may be conditions where researchers need support in terms of per diem and incentives since grant money for research may not lapse longer than the age of research activity. In response to the question whether they got some supports in terms of per diem and incentives, majority (23, 76.67%) of the respondents disagreed; and, only 5(16.66%) agreed.

Perhaps, the percent of responses which showed lack of surety was very small (6.67%). To the contrary, responses from top officials through interview denote the following:

> *Research works are subsidized on planned bases. The university arranges for researchers to defend their works before undergoing the research proper. The surprise is that, both the researcher and their respective departments do not sieve through the clarity and validity of the research to be done. They seldom make due follow-up on the wherefore of started research as well. Departments and schools simply send proposals to the top university administration. It is hard to facilitate the expenses when researches held do not have direction, since it, partly, senses like unwarranted expense. (P$_2$, May 17, 2015)*

It is evident from the above research that, the university arranges financial resources on the bases of its holdings. Yet, the different units concerned with arranging preconditions that can help facilitation of the different expenses lack due concern. That type of indifference leads to trivialized processing. The overall point is that, the unanimity between top-level expectation and the grassroots processing is not well-adjusted. Some of the responses indicated that, failure to organize research level may have been related with lack of well-built research tradition on the one hand and in-staff inclination to share research remuneration for personal use on the other. By and large, research was not dealt with in the way it could solve problems in the realms of teaching and learning but rather focused on self-will and personal grudge to earn money.

Arrangement of Office and Furniture

Table 8. Arrangement of Office and Furniture for Researchers

	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	6	20.0	20.0	20.0
Disagree	20	66.7	66.7	86.7
I am not sure.	4	13.3	13.3	100.0
Total	30	100.0	100.0	

The table above holds data on the respondents' reflections on the arrangement of office and furniture for researchers. By the term "office", the sense was also inclusive of space and related complements, and the term "furniture" had references to computers, stationery materials, chairs and tables. In response to the question, majority of the data providers indicated their not getting due support (20, 66.7%). Some of the responses agreed to the idea that, offices and facilities were arranged in due form (20%) while there were also others who did not have any awareness about such facilities (13.3%). The response to the same question on the part of the university top-management denoted the following:

> *Facilities such as computers and stationery material are fully organized whether it is for academia or research. What I have reservation on is that, there are no offices separately organized for researchers. This is due to two main reasons. In the first place, it is hard to know who can definitely be made out as a researcher. In the second, the tradition is not well-built up to*

now. Perhaps, we are arranging for the upcoming sessions. (P₃, May 29, 2015)

As evidenced in the above data, there are distinctions on the facility issues. Some of the facilities such as computers (Desktop or Laptop) are settled for teachers by virtue of their being staff. Other facilities (such as offices), as the data above denotes, need verification on who uses them in holding research.

So, the personal aspect lacked clarity for the facility issue to be dealt with. On the top of personal non-identification, there was also lack of well-built research tradition whereupon facilities could be organized for researchers to act on readily available resources.

Opportunity for Advisory Support and Experiential Exchange

Table 9. Opportunity to Get Advisory Support and Experiential Exchange

Response Options	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	5	16.7	16.7	16.7
Disagree	22	73.3	73.3	90.0
I am not sure.	3	10.0	10.0	100.0
Total	30	100.0	100.0	

Regarding arrangement of advisory supports due researchers, the responses were more to the negative (73.3%), and only limited percentage of responses affirmed (16.7%). It is clear from the data that, the institution had gaps in arranging advisory supports which could help researchers in their endeavour both as complementary and backup provision. The response from top-officials also denoted lack of well-organized supports excepting those arranged for PhD candidates.

One of the participants had to say this:

> *In-staff exchange of experiences is expected to be the best means of getting heed on research techniques and pivots. We mostly offer support on graduate research such as Master's Degree and PhD candidates on the bases of their approved proposals. Otherwise, we leave the in-service research advisory services to the staff overall. There is no experiential exchange subsidized by the university but, at times, university-focused research visits are funded on the conviction that, the in-service research has relevance for the institutional need. (P₁, May 22, 2015).*

From the above condensed data, it could be stated that, advisory services for institution-based in-service research were not set to practice. Heggen, Kareth and Kyvik (2010) assert for instance that, the staff in higher education need research for different purposes for which they need guidance and supervision such being research-based teaching, research-based learning, professional practices boosted by research, and improvement of knowledge base. Bulteman-Bos (2008) also asserts that, the relevance in education research is transforming skills of practitioners from simple instructors to researchers thorough skills-exchange and advisory guides. Yet, in the research case underway, there were rare such practices by far.

Reduction of Task-load for Teacher Researchers

Table 10. Reduction of Task-Load for Teacher Researchers

Response options	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	3	10.0	10.0	10.0
Disagree	22	73.3	73.3	83.3
I am not sure.	5	16.7	16.7	100.0
Total	30	100.0	100.0	

One of the challenging points teachers raise as setback on co-curricular activities is heavy workload. Actually, where teachers hold heavy instructional logs, it would be hard to expect them to hold research works of any sort. The question related to workload reduction at institution level was, then, raised to make clear if there were breakthroughs to let teachers free in order for them to have ample time for research. In that, majority of the respondents disagreed (22, 71%) whereas only three respondents (10%) affirmed their getting such a backup. Somewhat considerable was also the response given as not being sure (16.7%). From the above data, it could be evidenced that, teachers were caught up by overworking, and apparently, got short of time for research.

Hence, time-constraint could, somehow, be one of the determinants on teachers' research endeavours. In the actual sense, however, there were schools without heavy task-load where very few researches were held, like in the School of Education Sciences. Contrary to the data provided above, the non-existence of research endeavours even where there are no heavy task-logs denotes that, other factors than time-constraints could be more determinant on research endeavours by the staff.

Identification and Publicity of Research Thematic Areas

Table 11. identifying and publicizes research thematic areas on a timely basis

Response Options	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	7	23.4	23.4	23.4
Disagree	19	63.3	63.3	86.7
I am not sure.	4	13.3	13.3	100.0
Total	30	100.0	100.0	

Though most of the respondents disagreed on the likely provision by the university of research thematic areas (63.3%), a relatively higher rate of response (23.4%) showed agreement on the institutional provision in terms of identifying research thematic areas. Perhaps, there were also respondents who underlined their not having any heed on research thematic area at all (13.3%). Implications could be derived. While the response on the part of teachers is more to thematic non-identification, the reaction on the part of the university officials takes a different form, as under:

> *The university organized multi-group teams who identified thematic areas of research at different times. The thematic areas were developed into a document and were sent to respective schools. It is a point of dubiety if or not schools, through their departments, have communicated the thematic areas in order for the staff to develop research scheme. (P4, May 21, 2015).*

From the data above, it could be inferred that, though the university worked on identification of key research focuses through its concerted teams, it was uncertain whether the developed thematic concern reached the staff who could convert the thematic area to research.

Support for Reliable Publishing

Table 12. Supports for Researchers to get Reliable Publishing

Response options	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	7	25.8	23.3	23.3
Disagree	15	50.0	50.0	73.3
I am not sure.	8	26.7	26.7	100.0
Total	30	100.0	100.0	

Most of the responses in the above table denote that, there was no provision in terms of supporting publication (50%). Perhaps, some of the responses indicated the contrary, expressing that, there was publication-based support (25.8%) whereas others denoted their having no evidence to claim agreement or disagreement (26.7%). Taking the majority idea to view, the institutional response to interview senses similar to the assertion given above as it states:

> *We lack university-based research journal to support our research staff. Actually, there are online provisions in indicating which journal they should follow as per their areas, in line with institutions with which Adama Science and Technology has ties. The point to the major is that, the researches held so far do not qualify the standard for international publication, to be sure! (P$_1$, May 26, 2015).*

It is clear from the qualitative assertion that, three thematic concerns could be made out. The first thematic concern is one referring to lack of journal on the part of the university. the second thematic concern is that, there is heavy dependence on international journals having ties with the respective university.

The third thematic concern goes to the idea that researches held so far lacking due standard and quality. Thus far, the ideal mismatch between what the staff raise as pitfall and the projection on the part of the university officials expressing non-standard in the quality of researches being held indicates that, there is institutional overshadowing over the progresses through research.

Safety of Research Storage

Table 13. Emphasis Given to Completed Works to be Stored Safely and Used as References

Response options	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	2	6.7	6.7	6.7
Disagree	23	76.6	76.6	83.3
I am not sure	5	16.7	16.7	100.0
Total	30	100.0	100.0	

The staff respondents had the impression that, they have never seen research works being given attention in the university repositories, including the highly-paid-for PhD research documents. This is evident from the responses provided in the table and additional remarks the researcher collected from the staff which ran as under:

> *Though there are initiatives on the part of the staff to hold research both for promotion and institutional development, the rate of facilitation falls far below the*

required status. Even when you hold research on your own and ask for publicity, no one pays attention to your endeavour. (P$_{1a,}$ Staff Interviewee, May 26, 2015).

From the quoted response, it could be stated that, the research initiatives of the staff are not appreciated and given any space by the university officials, to the level of declining storage and publicity. As denoted in the above lines, the university officials attribute less attention given to research to three basic elements such being institutional hacked tradition which does not allow smooth handling of research, experiential gap on the part of the staff to produce research works that meet the expected quality standard, and lack of commitment on the part of the staff to workout quality research.

Support for Domestic and International Participation in Research

Table 15. Supports due Teacher Researchers to Participate on Domestic and International Research Symposia

Response Options	Frequency	Percent	Valid Percent	Cumulative Percent
Agree	8	26.6	26.6	26.6
Disagree	17	56.7	56.7	83.3
I am not sure.	5	16.7	16.7	100.0
Total	30	100.0	100.0	

The table depicts the fact that, the data to the most inclined to disagreement to institutional support for researchers to participate on national and international symposia (56.7%), and only 8 respondents (26.6%) agreed to the idea that there was support for participating on national and international symposia, and the lowest rate of responses was to lack of surety (16.7%). Here, the top-officials' responses to interview had a different reflection:

The university supports teachers who have research initiatives. For instance, besides covering full or a part of the accommodation for international symposia, it arranges for incentives where the researches have relevance to academic and practical for the university's goals. (P$_{1,}$ May 26, 2015).

From the above qualitative explication, it is evident that, the university has some way of helping researchers when they get chances for international symposia. But, there appears to be some kind of reservation on the initiatives with regard to fitness of the research for the university's goals. Where the university sticks to nurturing technological experiences, and all goals shine over applied research, science and technology, and engineering, it is hard to imagine a comprehensive view of research across all fields. The initiatives as set across goals are, therefore, prone to a single institution-Engineering, which is termed sin qua non for the progresses sought to come at large.

Discussion and Conclusion

Discussion of Major Findings

Though teachers reflected their having efforts and experiences to workout research, wide-scale participation was not witnessed both on the part of the teachers and officers. The findings denoted absence of clear guide on the part of the university officers and lack of system-based communication of research pivots on the part of departments and faculties.

Teachers' participation on national and international research symposia was not strong basically

owing to lack of well-developed research tradition and lack of focus on the part of the practitioners.

While teachers notified not getting research thematic areas to hold research of innovative values, the university top-officials remarked lack of commitment on the part of teachers even where funded were allotted so far.

From the data analysed and discussion so far made, it could be asserted that, both individual and institutional determinants were observed as bottlenecks on research productivity which could be related to production and dissemination of findings for use. With regard production of research findings, the individual determinants are failure to keep research skills up-to-date, failure to work with immediate departments to get thematic research focus, and giving priority to research-based incentives could stated as the major ones. Institutional determinants include rarity of opportunity for publication and dissemination of research, very tight condition of work and lack of offices and facilities.

In relation to the above findings, it could be concluded that, research in the target university was not well-handled both at individual and institutional levels, in a sense that, though majority of the teachers affirmed their having dependable research skills; there were no visibly produced works. The top officials' assertions denoted staff research endeavours to be below standards but there have not been any attempts made to develop teachers' skills. Exchange of research experiences at national and international levels was also of very rare nature with regard to comprehensiveness, consistency and depth of workability. Moreover, the correlation between years of service (so far termed experience) and number of research works produced was very low(r=0.079).

Limitations and Implications for further research

Taken research as the crucial instrument of development, it is essential for teachers to hold research for their own very promotion and improvement of practices. In line with this reality, it is essential for teachers in Adama Science and Technology University to update their research skills both at individual and team levels. The host institutions (respective schools and departments) should also adjust conditions for staff research by identifying and communicating thematic areas and paving ways for their communication in a workable manner. The university, overall, needs to develop a wider realm of exchange for its staff besides the university-industry linkage widely heralded so far, since learning and research are for human development. The university should also see to research from the wider perspective of using research for knowledge development besides immediate consumption.

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