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Publication productivity of academics in Jigjiga University, Ethiopia

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This descriptive cross-sectional survey examined faculty publication productivity at Jigjiga University, Ethiopia. It, specifically, aimed at exploring the factors and barriers that may influence publication productivity among academic staffs while also comparing variations across academic disciplines. The survey employed self-administered questionnaire distributed to 120 faculties randomly selected from nine academic disciplines during February to April 2016. This observation indicated that only 38.3% of the academic faculty members have published a research work since joining Jigjiga University. Publication of journal articles was the predominant type of publication outlet (58.7%) followed by conference proceedings (13%). The analysis result indicated that there was statistically significant ($p<0.05$) variation in publication productivity in relation to years in academic profession, highest degree earned and academic rank of the respondents. Similarly, faculty members who had track records on research grant winning, theses supervision as well as attending academic conferences and research related trainings were more likely to publish ($p<0.05$) as against those who did not have such experiences. However, there was no statistically significant difference ($p>0.05$) in publication productivity in relation to sex, age, teaching load and involvement in administrative activities. In addition, significant variation ($p<0.05$) existed on publication productivity across academic disciplines. Faculties in the natural and life science fields generally appeared to publish more than those in the social sciences. Respondents cited several factors that can be implicated in the low prevalence of publication productivity at Jigjiga University. The most cited barriers in order of higher frequency include lack of recognition such as promotion, absence of institutional research journal, poor access to information sources such as internet connectivity, insufficient research facilities, lack of financial incentives, lack of institutional/department support on publication, high publication charges inquired by journals, and poor research and publication atmosphere which were agreed upon by about 75% of the respondents. Most of these obstacles were organizational in nature, and thus focus to improve research productivity should consider tackling these factors at institutional level. Therefore, results of this survey imply that understanding these inhibitory factors and designing appropriate intervention strategy may help Jigjiga University towards improving the research and publication productivity of its academic faculty members.

Key words: Publication, productivity, research, faculty, academics, Jigjiga University.

INTRODUCTION

Research plays a critical role in promoting the prosperity of a nation, and the well-being of its citizens in this knowledge-based era (Abbott and Doucouliagos, 2004). Scholars indicated that scientific research is an imperative component of success in the academic disciplines (Mezrich and Nagy, 2007), and that the assessment of the research productivity in academic institutions is an important measure of the extent of their contributions to developing new knowledge (Tess et al., 2009).

Academic institutions primarily measure research productivity based on published work, externally funded grants, and the number of citations the published work received (Middaugh, 2001; Porter and Umbach, 2001). According to Creswell (2014), the most frequently used measure of the quantity or amount of research productivity is a numerical publication count over a certain time period. The published works could be journal articles (refereed and non-refereed), books (including edited books, textbooks), book chapters, monographs, conference papers, and research proposals written to receive external and internal grants (Middaugh, 2001). The most common research productivity measures look at publications that are submitted, accepted (in press), or published (Arriola-Quiroz et al., 2010; Zhuo, 2008).

Through publication, scholars keep abreast of their field, verify information, obtain critical response to their work and redirect research interest (OMeara and Braskamp, 2005). Faculty publishing productivity is often used as an index of departmental and institutional prestige, and is strongly associated with individual (Sax et al., 2002; Warlick and Vaughan, 2007), organizational (Sypsa and Hatzakis, 2009) and environmental factors (Haines et al., 2010).

Understanding factors associated with research productivity is important for leaders of academic institutions. The identification of factors promoting or impeding research productivity has been the focus of studies in different disciplines (Toutkoushian et al., 2002). Most of these factors have been classified into two broad groups; individual and institutional factors. Individual factors included aspects such as researcher's age, gender, salary, academic rank, number of years in the profession, teaching load and the faculty members' confidence in writing refereed works. Institutional factors included the institution size, funds allocated to research, presence of research groups, departmental support, subscriptions of journals, and the availability of information technology (Wager, 2009). Although, only few studies consider disciplinary differences in their analytical models of research performance, it is also known that faculty in different disciplines differ in their research productivity (Muis et al., 2006).

In developing countries like Ethiopia, little is known about research productivity in academic institutions and the available literature was conducted in developed countries. It is believed that faculty publication output is very low in majority of Ethiopian higher institutions, particularly in the new generation universities. For example, according to the results of a 10-year goggle search by a scholar, more than 80% of the academic publications in Ethiopia were from the four well-established universities (Library of Congress Overseas Office, 2010).

There is, thus, a need to initiate a systematic study that identifies the extent of publication productivity and determine factors, and barriers that may influence research publication among academic staffs. Such studies will help decision makers in universities take appropriate interventions that promote research production and remove some of the obstacles that may impede faculty publishing.

This study, therefore, explored the faculty publishing productivity, disciplinary differences in faculty research productivity, and inhibitory factors to publication among academic staffs at Jigjiga University (JJU), Ethiopia.

METHODOLOGY

Study design and population

The study employed a non-experimental cross-sectional design, and adopted the descriptive survey method. The population of this study consisted of the 2015 to 2016 on-campus teaching faculties in all colleges at Jigjiga University. Jigjiga University is one of the higher learning institutions in Ethiopia established in 2007.

Sampling technique and sample size determination

A multi-stage sampling procedure was adopted. First, colleges, institutes and schools were selected. Secondly, departments were randomly selected from each of the colleges/institutes/schools. Third, a sampling frame of 50% of academics in each of the departments was selected randomly, and invited for participation. The newness of the academic unit, and its faculties was considered at each stage of the sampling procedure. The sample size adjustment was considered to compensate for attrition (namely, inadequately filled or missing questionnaires).

Data collection instrument and protocol

The instrument used to collect data for this study was a questionnaire. In order to determine the level of publication

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Table 1. Socio-demographic features and academic profile of participants (n=120).

Characteristics	Category level	Frequency	Percentage
Sex	Male	114	95
	Female	6	5
Age	≤30	76	63.3
	>30	44	36.7
Years in academic profession	≤5	40	33.3
	>5	80	66.7
Highest degree earned	Masters	115	95.8
	Doctorate	5	4.2
Academic rank	Lecturer	107	89.2
	Assistant professor	13	10.8
Annual teaching load	≤6	12	10
	(6, 12]	76	63.3
	>12	32	26.7
Involved in administrative works	Yes	37	30.8
	No	83	69.2

productivity of the respondents, publication outputs of faculty members since joining JJU was considered. In this regard, full-time faculty members who had served for at least two years in JJU and holding master's degree and higher were recruited as respondents. The questionnaire was developed to capture information relevant to the study, and consisted of three parts.

Part 1 sought information on the general socio-demographic profile of respondents such as their gender, age, highest degree earned, academic rank, and years of experience in the academic profession. Part 2 consisted of questions regarding research, and publication activities and experiences.

In particular, respondents were requested to identify whether they had published any peer-reviewed article since joining JJU (yes/no). Those who answered in the affirmative were asked to identify the number of articles, the type of authorship and the publication outlet. Similarly, respondents were asked to report whether they had supervised postgraduate students' research (yes/no) and whether they had attended any training on research methods and publication processes after their graduation (yes/no).

In order to determine the quality of the published work, respondents were asked to identify whether such research had been accepted or published by any of the indexed journals recognized and listed by Google scholar (yes/no). The final part requested respondents to identify possible and obstacles to publishing research articles. In this section, respondents were given a list of possible inhibiting factors, based on an extensive review of the literature, and were instructed to mark as many barriers as applied. Lastly, open-ended comments were inquired from respondents to reflect their view of the research study in anticipation of changes that may occur to facilitate the implementation of the strategic research and publication objectives at JJU.

In order to increase the content validity of the questionnaire, an extensive literature review on faculty research productivity was carried out and pilot-tested. On the basis of the outcome of the pilot survey, the final questionnaire was reformulated. Respondents were informed of the purpose of the study and consent was obtained. Respondents were also assured of confidentiality, and it was made clear to respondents that neither their names nor their academic unit would be mentioned.

Statistical analysis

The data gathered from this study were analyzed using statistical package for social sciences (SPSS-20), and presented in a descriptive fashion. Chi-square test was used to test the difference between categorical variables, and to identify factors that significantly influence respondents' research productivity. Statistical significance was held at level of 0.05.

RESULTS

The respondents surveyed were predominantly males (95%) holding master's degree (95.8%), and were at academic rank of lecturer (89.2%). Majority of the participants were younger than 30 years (63.3%), and have been in the academic profession for above 5 years (66.7%) (Table 1).

The vast majority of respondents (61.7%) did not publish any research article since joining Jigjiga University (Table 2). Among the faculty members who have published their researches, more than three fourth (84.8%) claimed to have published in journals indexed,

Table 2. Publication productivity among faculty members at Jigjiga University.

Aspects	Category level	Frequency	Percentage
Had published an article since joining Jigjiga University (n=120)	Yes	46	38.3
	No	74	61.7
Number of articles (n=46)	1	21	45.7
	2-5	13	28.3
	>5	12	26.1
Type of authorship (n=46)	Sole author	7	15.2
	Co-author	28	60.9
	Bothe sole and co-author	11	23.9
Type of publication outlet (n=46)	Journals only	27	58.7
	Conference proceedings only	6	13
	Both journals and conferences	12	26.1
	Books (book chapters)	1	2.2
Published in indexed journals (n=46)	Yes	39	84.8
	No	7	15.2

and recognized by Google scholar. It was also noted that most of the respondents (45.7%) published only one article. Publication of journal articles was the predominant type of publication outlet (58.7%) followed by conference proceedings, and co-authorship (60.9%) outnumbered sole-authorship (Table 2).

The publication productivity of Jigjiga University academics in relation to selected demographic and academic characteristics is presented in Table 3. The analysis result revealed that there was variation in publication productivity amongst the different categories of respondents in relation to various characteristics considered. The variation was statistically significant ($p<0.05$) in relation to years in academic profession, highest degree earned and academic rank of the respondents. Senior academics, PhD holders and assistant professors showed significant superiority on research and publication productivity as compared to juniors, masters' degree holders and lecturers, respectively. Similarly, faculty members who had track records on research grant winning, theses supervision as well as attending academic conferences and research related trainings were more likely to publish ($p<0.05$) as against those who did not have such experiences. However, there was no statistically significant difference ($p>0.05$) in publication productivity in relation to sex, age, teaching load and involvement in administrative activities.

The respondents sampled were from different academic disciplines. The analysis result indicated that statistically significant difference existed in publication productivity (χ^2 = 25.28; P= 0.00) among different disciplines. It was noted that more than 75% of the respondents from veterinary medicine and dryland agriculture streams had published at least one article since joining Jigjiga University, whereas half of the respondents form law and health sciences had published. Surprisingly, none of the respondents from engineering and technology streams had published any scholarly article (Figure 1).

With regards to knowledge and perception of faculty members towards publication, the vast majority of the participants (91%) know the importance of publication and more than half of the respondents perceived it obligatory for an academic staff in a university. However, there existed considerable difference towards these issues between those who had published versus who did not. On the other hand, only a quarter (25%) of the respondents reported that publication is not a primary measure of research productivity. Under all the considered categories, higher number of participants who have not published any article since joining Jigjiga University appeared to have weak propensity towards publication as against those who had published (Table 4).

Table 5 summarizes possible barriers and obstacles hindering publication productivity as perceived by Jigjiga University academics. The most cited barriers in order of higher frequency include lack of recognition such as promotion and publication incentives, absence of institutional research journal, poor access to information sources such as internet connectivity, insufficient research equipment/facilities, lack of financial incentives, lack of institutional/department support on publication, high publication charges inquired by journals, and poor research and publication atmosphere which were agreed

Table 3. Publication productivity of Jigjiga University academics in relation to selected demographic and academic characteristics.

Characteristics	Category level	Published since joining Jigjiga University		χ^2	P-value
		Yes (%)	No (%)		
Sex	Male (n=114)	44 (38.6)	70 (61.4)	0.67	0.80
	Female (n=6)	2 (33.3)	4 (66.7)	-	-
Age	< 30 (n=76)	28 (36.8)	48 (63.2)	0.20	0.66
	>30 (n=44)	18 (40.9)	26 (59.1)	-	-
Years in academic profession	≤5 (n=40)	10 (25)	30 (75)	4.51	0.034
	>5(n=80)	36 (45)	44 (55)	-	-
Highest degree earned	Masters (n=115)	41 (35.7)	74 (64.3)	8.39	0.004
	Doctorate (n=5)	5 (100)	0 (0)	-	-
Academic rank	Lecturer (n=107)	35 (32.7)	72 (67.3)	13.21	0.00
	Assistant professor (n=13)	11 (84.6)	2 (15.4)	-	-
Involved in administrative work	Yes (n= 37)	16 (43.2)	21 (56.8)	0.55	0.46
	No (n=83)	30 (36.1)	53 (63.9)	-	-
Annual teaching load	≤6 (n=12)	7 (58.3)	5 (41.7)	2.71	0.07
	(6, 12) (n=76)	29 (38.2)	47 (61.8)	-	-
	>12 (n=32)	10 (31.3)	22 (68.7)	-	-
Participated in research related training	Yes (n=43)	20 (46.5)	23 (53.5)	1.89	0.17
	No (77=)	26 (33.8)	51 (66.2)	-	-
Participated in publication related training	Yes (n=18)	10 (55.6)	8 (44.4)	2.66	0.578
	No (n=102)	36 (35.3)	66 (64.7)	-	-
Attended academic conferences	Yes (n=76)	38 (50)	38 (50)	11.94	0.001*
	No (n=44)	8 (18.2)	36 (81.8)	-	-
Had supervised thesis	Yes (n=22)	14 (63.6)	8 (36.4)	7.29	0.006*
	No (n=98)	32 (32.7)	66 (67.30	-	-
Received research grant	Yes (n=53)	30 (56.6)	23 (45.4)	11.94	0.00
	No (n=67)	16 (23.9)	51 (76.1)		

upon by about 75% of the respondents.

Obstacles such as stringent publication process to publish on quality journals, technical difficulties in journal selection, subscription and submission, and heavy teaching load were reported by approximately half of the respondents. The least cited barriers encompass lack of interest on publication, inadequate experience in research methodology, lack of awareness on publication, and lack of self-interest in carrying out research (Table 5).

DISCUSSION

This descriptive observation indicated that only 38.3% of the academic faculty members have published a research work since joining Jigjiga University, and 84.8% of these claimed to have published in indexed and learned journals. This finding does not strongly confirm the culture of publish or perish in academic institutions. Most of the methods for measuring research productivity involve measuring the number of scholarly articles published. Through publication, scholars keep abreast of their field, verify information, obtain critical response to their work and redirect research interest (O Meara and Braskamp, 2005; AAU, 2008).

The literature suggests that research is not done until it is published, and publications enable academics to earn recognition in academic circles locally and internationally. In higher education, research publication often served as a major role in attaining success in academics circles as it is related to promotion, tenure, and other recognitions

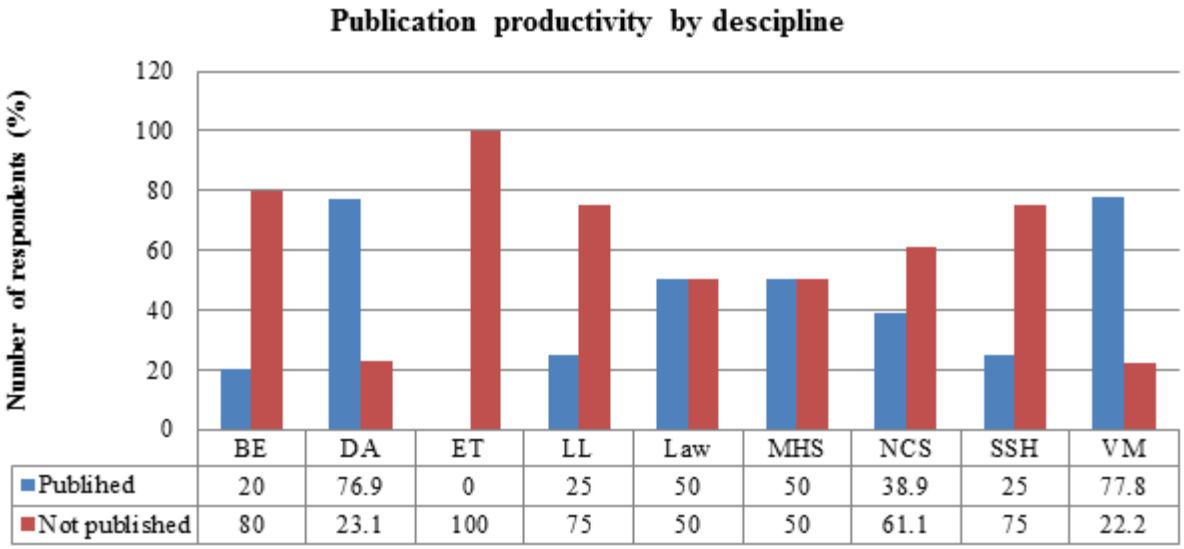

Figure 1. Faculty publication productivity by discipline. BE= Business and Economics; DA= Dryland Agriculture; ET= Engineering and Technology; LL= Language and Literature; MHS= Medicine and Health Sciences; NCS= Natural and Computational Science; SSH= Social Science and Humanities; VM= Veterinary Medicine; P<0.001 (χ^2 = 25.28; P= 0.00).

Table 4. Perception and attitude of Jigjiga University faculty towards publication (n= 120).

Aspects	Category level	Published since joining Jigjiga University	
		Yes	No
How perceiving publication	Obligatory (n=63)	30 (47.6)	33 (52.4)
	Not obligatory (n=4)	2 (50)	2 (50)
	Necessary but not obligatory (n=48)	13 (27.1)	35 (72.9)
	Do not know (n=5)	1 (20)	4 (80)
Knows the importance of Publication	Yes (n=111)	46 (41.4)	65 (58.6)
	No (n=9)	0 (0)	9 (100)
Is publication a primary measure of research productivity?	Yes (n= 90)	41 (45.6)	49 (54.5)
	No (n=30)	5 (16.7)	25 (83.3)

(Bloedel, 2001; Kotrlik et al., 2002; Bassey et al., 2007).

The low prevalence of research and publication productivity reported in this study could be attributed to various factors. An examination of the literature reveals that the factors influencing faculties' research productivity have been studied for decades. There are a number of factors such as scholarship (Arora and Gambardella, 1996), age and life cycle (Levin and Stephan, 2011), research activity performance of department (Smeby and Try, 2005), scientific collaboration (Lee and Bozeman, 2005), quality of training or individual abilities and skills (Wichian et al., 2009), and faculty motivation and incentives (Monroe and Kumar, 2011b). These factors are generally of two types: individual variables and environmental variables. The individual and environmental characteristics do not operate by themselves; they are interwoven with each other (Hadjinicola and Soteriou, 2006).

In the process of obtaining and disseminating knowledge, numerous personal characteristics and demographic variables impact faculty research productivity. The strength and confidence of the faculty were confirmed as necessary factors in ensuring high levels of research productivity (Bland et al., 2002). Self-motivation, essential skills and experience are the fundamental drivers that encourage lecturers to do research. If there are no fundamental drivers, even if the university provides other supportive factors, the university's efforts will be fruitless (Bay and Clerigo, 2013).

Table 5. Possible barriers and obstacles to publication productivity as perceived by Jigjiga University academics.

Inhibiting factor	Frequency (%)					Standard deviation
	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	
Lack of time in carrying out research	23 (19.2)	49 (40.8)	6 (5)	33 (27.5)	9 (7.5)	1.28
Lack of self-interest in carrying out research	36 (30)	44 (36.7)	6 (5)	28 (23.3)	6 (5)	1.27
Lack of financial incentives	8 (6.7)	18 (15	5 (4.2)	49 (40.8)	40 (33.3)	1.24
Inadequate experience in research methodology	22 (18.3)	57 (47.5)	5 (4.2)	33 (27.5)	3 (2.5)	1.15
Inadequate experience in statistical techniques	20 (16.7)	44 (36.7)	8 (6.7)	43 (35.8)	5 (4.2)	1.23
Poor research and publication atmosphere	11 (9.2)	17 (14.2)	12 (10)	44 (36.7)	36 (30)	1.29
Technical difficulties in manuscript writing	20 (16.7)	47 (39.7)	13 (10.8)	32 (26.7)	8 (6.7)	1.22
Technical difficulties in journal selection, subscription and submission	10 (8.3)	37 (30.8)	13 (10.8)	50 (41.7)	10 (8.3)	1.18
Lack of time to prepare manuscripts for publication	21 (17.5)	52 (43.3)	7 (5.8)	29 (24.2)	11 (9.2)	1.28
Stringent publication process to publish on quality journals	9 (7.5)	13 (10.8)	24 (20)	54 (45)	20 (16.7)	1.12
Lack of interest on publication	31 (25.8)	54 (45)	16 (13.3)	14 (11.7)	5 (4.2)	1.09
Lack of awareness on publication	27 (22.5)	50 (41.7)	11 (9.2)	26 (21.7)	6 (5)	1.20
High publication charges inquired by journals	7 (5.8)	13 (10.8)	19 (15.8)	57 (47.5)	24 (20)	1.09
Heavy teaching load and schedule	11 (9.2)	42 (35)	10 (8.3)	42 (35)	15 (12.5)	1.26
Investing much time to administrative works	20 (16.7)	42 (35)	4 (3.3)	45 (37.5)	9 (7.5)	1.29
Poor access to information sources such as internet connectivity	6 (5)	11 (9.2)	10 (8.3)	48 (40)	45 (37.5)	1.13
Lack of institutional/department support on publication	2 (1.7)	16 (13.3)	14 (11.7)	50 (41.7)	38 (31.7)	1.05
Insufficient research equipment/facilities	5 (4.2)	15 (12.5)	5 (4.2)	64 (53.3)	31 (25.8)	1.08
Lack of recognition such as promotion and publication incentives	0	10 (8.3)	6 (5)	39 (32.5)	65 (54.2)	0.91
Absence of institutional (JJU) research journal	7 (5.8)	7 (5.8)	12 (10)	46 (38.3)	48 (40)	1.23

In this observation, no difference in publication productivity was noted between male and female faculty members. It is worth noting that the respondents surveyed in this study were predominantly males (95%) and thus, with this limitation it is difficult to contrast this finding with different works reported from other countries or universities. However, previous works indicated that female faculty members are less likely to publish than their male counterparts (Billard, 2013; Olatokunbo, 2013; Kyaligonza, 2015). It has been suggested that the discrepancy in research output between males and females could be attributed, directly or indirectly, to the gender patterns in disciplinary and institutional affiliation, marital status, workload, and faculty rewards (Lyengar et al., 2009). On the other hand, another group of studies has found that there is no difference in research performance between males and females after controlling for other variables (Lee and Bozeman, 2005; Porter and Umbach, 2001).

Similarly, age was not found to be associated with publication productivity. Age has been studied in numerous works, with conflicting results. Many studies about productivity have indicated that the relationship between publication and age is not linear, although the overall rate of publication generally declines with age (Teodorescu, 2000). Kotrlik et al. (2001) also observed that the average productivity of academic members drops with age but many senior academics remains active and that there is no significant evidence that age determines a drop in productivity. However, it is important to note that a person's age at first publication affects

consequent research productivity and that if academic lecturers submit research for their first publication at a young age, then it is more likely that they will produce more at future points in time (Levin and Stephan, 2011).

Years in academic profession, highest degree earned and academic rank significantly affected research and publication productivity of the academics in Jigjiga University. In this regard, seniors, PhD holders and assistant professors demonstrated significantly higher productivity than juniors, master's degree holders and lecturers, respectively. This observation is inconsonance with reports by numerous scholars who found that faculty staff with higher academic ranks and experience produces more research articles than those with lower academic ranks (Roberts and Turnbull, 2003; Alghanim and Alhamali, 2011). This implies that an institution vying to increase research productivity of its academic staff should ensure that the same staff has attained higher education levels and research experience (Kyaligonza, 2015).

On the other hand, the analysis result indicated that the vast majority of faculty members did not receive any training related to research and publication. But, those who received some sort of training on research skills and methodology were more likely to publish research articles. This implies that inexperienced faculty members should be acquired with the necessary research tools and methods that familiarize them with research design, proficiency in methods of statistical analyses, and techniques. The study finding in part agrees with previous reports in this regard (Alghanim and Alhamali, 2011). Szymanski et al. (2006) has demonstrated that research training environments (RTE) are associated with increased scholarly productivity, especially for early career professionals. The researcher-practitioner RTE model and the internship RTE model were found to be the most effective in fostering research interests and productivity in universities. Training is expected to develop and strengthen the skills and knowledge of the faculty members and to enable them to take up the challenging research activities. Training builds self-confidence in the minds of faculty (Subrahmanian, 2010). Wichian et al. (2009) also found that research experience and training in research gave better influence on research output utilization that research communication skills and networking and teamwork also affect research productivity.

Interestingly, attending academic conferences was associated positively with publishing research outputs. Respondents who had participated in such platforms were more likely to publish than those who had no such an experience. This could be associated with the motivation gained up on the networking on such meetings. In this study, it was also noted that faculty members who had supervised thesis and secured research grants at least once in their career demonstrated higher extent of producing scholarly publication as against those who had no such experience.

With regards to the possible barriers and obstacles hindering publication productivity, respondents cited several factors that can be implicated in the low prevalence of publication productivity of academics at Jigjiga University. Numerous other workers reported similar factors to inhibit academics from publishing their research findings (Sabzwar et al., 2009; De Witte and Rogge, 2010; Alghanim and Alhamali, 2011).

Most of these obstacles reported were organizational in nature, and could be tackled at the institutional level. Previous studies ascribed some organizational contexts to affect faculty research. For example, Smeby and Try (2005) found that a cooperative climate has a positive impact on faculty publication while an innovative climate has a negative impact. In addition, organizational supports such as library support, technology and computing facilities for faculty activity are also predictors of faculty research performance (Lee and Bozeman, 2005). Organizational characteristics such as institutional mission and size are also modeled to control for the variance accounted for by organizational factors (Corley and Sabharwal 2007; Porter and Toutkoushian, 2006). Thus, recognition such as promotion and publication based incentives, training on research, allocating appropriate funds, departmental support and creating a research atmosphere were among measures that could be taken to increase the research output both in quality and quantity. Some other barriers are associated with journals and are beyond the control of individuals and institutions. These included obstacles such as stringent publication process, high publication charges, and technical difficulties in journal selection and subscription.

This descriptive study also evidenced that Jigjiga University academics were very good at publishing journal articles followed by conference proceedings. Book or book chapters are rarely produced publication outlets. This is in line with the well established trend in that journal publication has traditionally been the conventional way to disseminate research results and other significant scientific contributions. Although other outlets for dissemination, such as conference presentations, books and book chapters have also existed, scientists generally have looked to journal articles for reports of new findings by their colleagues. Journal publication has also been the most important way for scientists to secure credit for their research contributions. Because journals, unlike some other publication outlets, publish articles only after expert reviewers conclude that the work is worthy of being published, publication signifies that an article has sufficient merit to survive the scrutiny of peer review (Bell et al., 2007). This could also be ascribed to the fact that most of the respondents were young and have limited experience to publish books as this requires a deeper knowledge and experience.

With regards to disciplinary perspective, faculty

members in the natural and life science fields generally appeared to publish more than those in the social sciences. Academics form veterinary science followed by agriculture, health sciences as well as natural and computational sciences appeared to excel as against those from other academic disciplines. This observation is not surprising as field-specific patterns and trends can affect faculty's research productivity. Although some scholars (White et al., 2009) quite rightly argue that differences in the nature of the products produced across disciplines would make direct comparisons of productivity difficult, the literature asserts that there is considerable differences between the publication productivity of physical/biological scientists and social scientists/humanists (Stack, 2004; Shin and Cummings, 2010; Sabharwal, 2013). The higher rate of productivity among natural and life science fields can be linked in part to the time spent on research activities and the availability of grants and industrial funding. The lower number of articles produced by social scientists is in part a reflection of the nature of the discipline (longer publication time, lengthier articles, fewer grants, and the difficulty of obtaining data (Shin and Cummings, 2010). It was surprising to note that none of the respondents from the engineering and technology stream had published any scholarly article thus far. This may somehow agree with Stack (2004) who reported that faculty in engineering and math fields had a low level of research productivity similar to the social scientists. Furthermore, some workers indicated that faculty in different disciplines differ in their collaborative work in academic research, their commitments to teaching and research, and their preferred publications (Muis et al., 2006, Olatokunbo, 2013). Nevertheless, few studies consider disciplinary differences in their analytical models of research performance.

Conclusion

The present study evidenced that there was relatively low prevalence of publication productivity among academic faculty members at Jigjiga University.

Despite the limitations on the number of respondents recruited and self-reported data, this descriptive study has provided valuable insight into factors and obstacles that may hinder publication productivity and related research endeavors among faculty members in Jigjiga University. Among the socio-demographic variables considered, academic qualification, rank, discipline, track records on research grant winning, theses supervision as well as attending academic conferences and research related trainings appeared to significantly influence publication productivity of faculty members.

Furthermore, most of the inhibitory factors cited by the respondents have organizational contexts and can be managed at institutional level. Some other barriers are associated with journals and are beyond the control of individuals and the institution. The results, therefore, indicated that tackling both the socio-demographic and institutional factors will likely increase publication output at Jigjiga University.

Recognition such as promotion and publication based incentives, training on research, allocating appropriate funds, departmental support and creating a good research atmosphere are among measures that could be taken to improve the publication output both in quality and quantity.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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