

PUBLICATIONS OUTLETS OF TEACHERS IN THE FIELD OF MATHEMATICS

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Abstract :

This paper focuses on publications patterns of teachers in mathematics, Nagpur. For this aim, the data was collected through questionnaire from teachers. Total 81 publications are published by 6 respondents. Study also discussed with language wise productivity, year wise and gender wise productivity of teachers.

Objective of the Study :

Present study has been undertaken with a view

However, specific objective of the study are:

1. To know the language wise productivity;
2. To find out the gender wise productivity; and
3. To identify the year wise productivity.

Hypothesis of the Study :

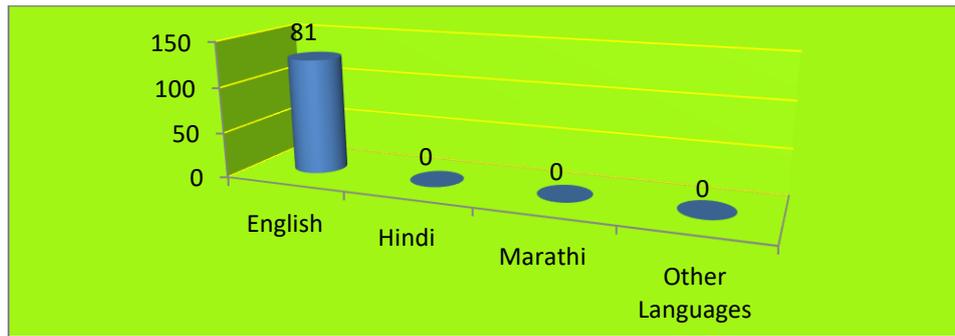
The hypothesis as

1. More the publications are published in English Language;
2. Male teachers produce more publications than female; and
3. Research productivity of teachers increase their publications year by year.

Research Methodology :

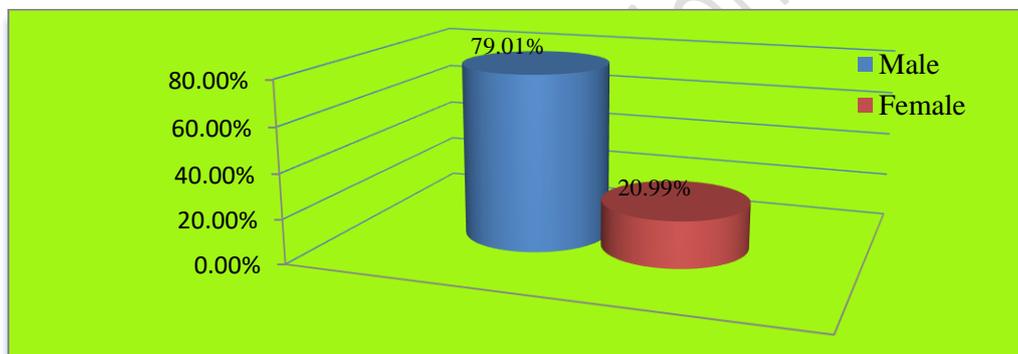
Survey of faculty members are used for this study and questionnaire technique is used to collect the data from the faculty members. Collected data has been analyzed by statistical techniques and presented data in tabular as well as in graphical form.

Figure no. 1: Language wise productivity of faculty members



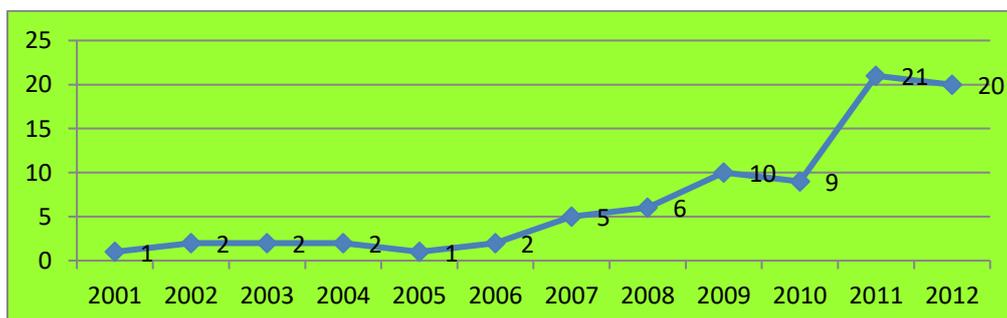
From the above figure, 81 (100%) publications are published in alone English language by all faculty members, means the Engineering and Technology subjects are dominated by English language. This indicates that **“More the publications are published in English language”**(hypothesis no.1) is valid.

Figure no. 2: Gender wise productivity of faculty Members



The above figure, data of in all 6 faculty members was analyzed according to gender. It can be found from the above table that male faculty members have published 64(79.01%) publications out of 81 publications giving 16.00 publications per male faculty members and female faculty members have published 17(20.99%) publications giving 8.5 publications per female faculty members. It can also be observed that male faculty member have published 3.76 times more publications than female faculty members. This indicates that **“male teachers produce more publications than female”** (hypothesis no.2) is valid.

Figure no. 3: Year wise productivity of faculty Members



In this domain, most productive year was 2011, as total productivity in this year was 21 publications, followed by 20 publications in 2012, 10 publications in 2009 and 9 publications in 2010. The year wise productivity is increased from 2005 to 2009, and then it has been decreased in 2010, then increased and then decreased. It means that the year wise productivity is increased-decreased manner means fluctuation productivity during the period of 2001 to 2004, then year wise productivity is increased from 2005 to 2009, means productivity is continuously increased up to 5 years. Hence, this indicates that **“research productivity of teachers increase their publications year by year” (hypothesis no.3)** is valid.

Table no. 1: Bradford’s Law of Scattering

Zones	No. of Papers	No. of Authors
I	39	1
II	22	2
III	20	3

The attempt was made to test applicability of Bradford’s Law of Scattering, as shown in above table. The total numbers of 81 publications of 6 faculty members were divided into 3 equal zones, while numbers of authors writing similar numbers of papers in each zone is in the ratio of 1:2:3. Which indicates that the data fits into the Bradford’s Law of Scattering.

Major Findings :

1. Total 81 publications are contributed by 6 faculty members.
2. 100% publications are published in alone English language by 6 faculty members, means the Engineering and Technology subjects are dominated by English language. This indicates that the hypothesis **“More the publications are published in English language”(hypothesis no.1)** is valid.
3. Male teachers have published 64(79.01%) publications out of 81 publications giving 16.00 publications per male teachers and female teachers have published 17(20.99%) publications giving 8.5 publications per female teachers. It can also be observed that male teachers have published 3.76 times more publications than female teachers. This indicates that **“male teachers produce more publications than female” (hypothesis no.2)** is valid.
4. Most productive year was 2011, as total productivity in this year was 21 publications, followed by 20 publications in 2012, 10 publications in 2009 and 9 publications in 2010. The year wise productivity is increased from 2005 to 2009, and then it has been decreased in 2010, then increased and then decreased. It means that the year wise productivity is increased-decreased manner means fluctuation productivity during the period of 2001 to 2004, then year wise productivity is increased from 2005 to 2009, means productivity is continuously increased up to 5 years. Hence, this indicates that **“research productivity of teachers increase their publications year by year” (hypothesis no.3)** is valid.
5. By test applicability of Bradford’s Law of Scattering, the total numbers of 81 publications of 6 teachers were divided into 3 equal zones, while numbers of authors writing similar

numbers of papers in each zone is in the ratio of 1:2:3. Which indicates that the data fits into the Bradford's Law of Scattering.

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