

# Sway of selected factors on publication behaviour of the Agricultural Scientist

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## ABSTRACT

The present study was undertaken in Anand Agricultural University of Gujarat state. For this study, 120 respondents were selected randomly. The data reveal that "own interest" was the prime motive behind writing the articles. However, the publication behaviour of the scientists was found to be low as more than two-third of the scientist had low level of publication behaviour. Further, it was found that except motives and attitude, all the variables included in the study were positively and significantly correlated with the publication behaviour.

## INTRODUCTION

Present age is the age of Science and Technology and we need an effective communication media to transfer the technology to the farmers' field. So far, mass media have emerged as the best mass communication avenue throughout the world.

India is the 7<sup>th</sup> largest country in the world in terms of area. Its share in land resources is only 2 per cent but it sustains 18 per cent and 15 per cent of the global human and livestock population. Agriculture is the most important

industry, which contributes 32 per cent to the G.D.P. After 60 years of independence about 64 per cent Indian population still depend on agriculture (Sheikh *et al.*, 2003).

Agricultural information thus, generated through research process must be documented and passed on to potential users. It must be published for the use of other research workers. Further, any research activity is said to be complete when its results are published in research journals or any other suitable print media. However, how many scientists published their results of research is not exactly known.

Publication is an important measuring yard stick of a scientist's career and his achievements. A list of publication is an evidence of one achievement. A publication gives status to individual scientists. Publications are the major determinants of job and promotions.

In agriculture universities agricultural scientists are working in various faculties and in various fields *i.e.* research, extension education, training, teaching, administration, management and field duty. They are involved in publishing the articles of different types. Therefore, keeping this in view, a study entitled, 'Sway of Selected Factors on Publication Behaviour of Agricultural Scientists of the Anand Agricultural University, Anand was undertaken with the following objectives:

- To determine the motives of agricultural scientists behind writing and publication.
- To study the level of the publication behaviour of the agricultural scientists.
- To ascertain the relationship between profile of agricultural scientists and their publication behaviour.
- To ascertain direct and indirect effect of profile of the agricultural scientists and their publication behaviour.

## MATERIAL AND METHODS

The present study was undertaken in Anand Agricultural University of Gujarat State. Out of 442 Agricultural Scientist, 120 Agricultural Scientist were selected randomly. All the respondents were personally interviewed. For measurement of variable, suitable scale developed by other social scientist was used with due modification. In light of the objectives the data analyzed using percentage, mean and correlation co-efficient.

## OBSERVATIONS AND ANALYSIS

The findings of the present study as well as relevant discussion have been presented under following heads :

### Motives of the agricultural scientists for writing and publication :

After every action of behaviour of an individual, certain reasons are there. These reasons or say motives propel an individual to do certain course of action. Likewise, there would be certain motives of the agricultural scientists behind writing and publication. The effort was made to study such motives. Here, the respondents indicated their views as most important, important and less important and score was assigned as 3, 2 and 1, respectively. Total score and mean score of each item were computed and are presented in Table 1.

The data presented in the Table 1 reveals that, the prime motives of agricultural scientists behind writing and publication was 'own interest' ranked first (2.55 mean score), followed by 'Helpful young scientist' (2.54 mean score), 'To be popular among scientific community and farming community' (2.34 mean score), 'Improving Bio data' (2.26 mean score), 'As a hobby' (1.91 mean score) and The motive 'to use leisure time in a better way' (1.40 mean score), respectively.

It can be concluded that most of the agricultural scientists wrote and published their articles by own interest. So, own interest was the most important intrinsic factor for Scientists for writing articles and its publishing their article.

This finding is in partial agreement with that reported by Soni (1990) and Lohar (1998).

### Level of publication behaviour :

To measure the level of publication behaviour of agriculture scientists, they were categorized on the basis of mean into two groups *viz.*, (1) low level (< 183.55) and (2) high level (>183.55). The data related to the publication behaviour of the respondents are given in Table 2.

It is clear from the data presented in Table 2 shows that majority (68.33 %) of the respondents were in the categories of low level of publication behaviour, followed

Sr. No.	Motives	Total score	Mean score	Rank
1.	Own interest	306	2.55	I
2.	Helpful to young scientists	305	2.54	II
3.	Improving bio-data	272	2.26	IV
4.	As a hobby	23	1.91	V
5.	To use leisure time in a better way	168	1.4	VI
6.	To be popular among scientific community and farming community	281	2.34	III

by 31.67 per cent of the respondents had high low level of publication behaviour.

This finding is in partial agreement with that reported by Lohar (1998).

**Relationship between profile of agricultural scientists and their publication behaviour :**

Co-efficient of correlation was applied to study the relationship between the profile of the agricultural scientists and their publication behaviour. The value of correlation co-efficient 'r' was tested for the statically significance. The results are presented in Table 3.

It is clear from the Table 3 that out of 12 variables, 10 variables were found to be positively and significantly

correlated with their publication behaviour. Two variables namely motives and attitude towards publication were found to be non-significant with their publication behaviour.

Thus, it can be inferred that age, education, experience, awards, training, scientific interaction, reading behaviour, motives, editorial involvement and types of publication played an important role in influencing publication behaviour of the scientists.

**Direct and indirect effect of profile of the agricultural scientists and their publication behaviour :**

The correlation co-efficient values (r) were found

Sr. No.	Level of publication behaviour	No. of Agricultural Scientist	Per cent
1.	Low level (< 183.55)	82	68.33
2.	High level (> 183.55)	38	31.67
	Total	120	100.00

Mean=183.55

Sr. No.	Variables	'r' Value
1.	Age	0.20092*
2.	Education	0.39400*
3.	Experience	0.47338*
4.	Cadre	0.46609*
5.	Award	0.68928*
6.	Training	0.24761*
7.	Scientific-interaction	0.78413*
8.	Reading behaviour	0.19147*
9.	Motives	0.13988 NS
10.	Attitude towards publication	0.16776 NS
11.	Editorial involvement	0.65597*
12.	Types of publication	0.37437*

\* indicates significance of value at P= 0.05

NS = Non-significant

Sr. No.	Variables	Direct effect	Total indirect effect	Substantial indirect effect through	
1.	Age	-0.0161	0.2170	0.1047	0.0258
2.	Education	0.0701	0.3239	0.1635	0.0795
3.	Experience	0.1000	0.3734	0.2005	0.1093
4.	Cadre	0.0407	0.4254	0.2159	0.0963
5.	Awards	0.3513	0.3380	0.2763	0.0311
6.	Training	0.0187	0.2289	0.1256	0.0484
7.	Scientific interaction	0.05139	0.2702	0.1889	0.0390
8.	Reading behaviour	0.011	0.1804	0.0761	0.0606
9.	Motives	0.0305	0.1094	0.0512	0.0256
10.	Attitude	0.0198	0.1875	0.0785	0.0491

to be significant in case of 10 variables as mentioned earlier. The data thus, indicate that observed relationship between the variables was partially absolute and partially relative. Moreover, partial relationship was a contribution made by other variables exercising their influence jointly.

It is therefore, necessary to study the influence of one variable on other variables both directly as well as through other variables presented in the situation. Hence, the significant variables were subjected to path analysis. The results of path analysis are presented in Table 4.

#### **Direct effect :**

The results of path analysis presented in Table 4 indicate that scientific interaction of the agricultural scientists had exerted the highest direct effect (0.5139) on their publication behaviour. It was followed by awards (0.3513), experience (0.1000), cadre (0.0407), motives (0.0198) and reading behaviour (0.011).

Age is the only single trait that had exerted negative and direct effect on publication behaviour.

#### **Total indirect effect :**

So far as total indirect effect is concerned, cadre with the value of 0.4254 stood first followed by experience (0.3784), awards (0.3380), education (0.3239), scientific interaction (0.2702), attitude (0.1875), reading behaviour (0.1804) and motives (0.1094).

#### **Substantial indirect effect:**

It was further revealed that out of 20 substantial indirect effects, nine routed through scientific interaction, eight through awards, two through experience and one through cadre.

With regards to substantial indirect effect the first substantial positive indirect effect on publication behaviour was put forth by awards received (0.2763) followed by cadre (0.2159) and experience (0.2005) through scientific interaction.

It could be concluded that scientific interaction was the key variable in exerting considerable direct and substantial effect on publication behaviour. Awards and scientific interaction are the major trait in determination of publication behaviour through positive indirect effect whereas age of the agricultural scientists is the only character which influenced negatively and directly.

#### **Conclusion :**

As results of the study, it could be concluded that the publication behaviour of the scientists is lowers more than two-third of the scientists had low level of publication behaviour. The “own interest” was the prime motives behind writing the articles. Further, it was found that except motives and attitude, all the variables included in the study were positively and significantly correlated with the publication behaviour.

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