

SWAY OF SELECTED FACTORS ON PUBLICATION BEHAVIOUR OF THE AGRICULTURAL SCIENTISTS

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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 scientists 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

Agricultural information generated through research process must be documented and passed on to the 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 yardstick of a scientist's career and his achievements. A list of publication is an evidence of one's achievements. Publication gives recognition to the scientists and thus gives status to individual scientists. Publications are the major determinants of job and promotions.

In agricultural 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 the Agricultural

Scientists of the Anand Agricultural University, Anand" was undertaken with the following objectives:

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

METHODOLOGY

The present study was undertaken in Anand Agricultural University of Gujarat State. Out of 442 Agricultural Scientists, 120 Agricultural Scientists were selected randomly. All the respondents were personally interviewed. For measurement of variables, suitable scale developed by other social scientists was used with due modification. In light of the objectives the data were analysed using percentage, mean and correlation coefficient.

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RESULTS AND DISCUSSION

Motives of the agriculture 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.

Table 1 : Motives of the agriculture scientists for writing and publication

N = 120

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.	To improve 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

The data presented in the Table - 1 reveal that the prime motive of agricultural scientists behind writing and publication was 'own interest' which ranked first (2.55), followed by 'helpful to young scientist' (2.54), to be popular among scientific community and farming community, (2.34), 'to improve bio-data' (2.26), 'as a hobby' (1.91), and 'to use leisure time in a better way' (1.4), respectively.

to the publication behaviour of the respondents are given in Table - 2.

It is clear from the data presented in Table - 2 that slightly more than two-third (68.33 per cent) of the respondents were in the category of low level of publication behaviour, and the rest i.e. slightly less than one-third (31.67 per cent) of the respondents had high level of publication behaviour.

Table 2 : Distribution of the agricultural scientists according to their level of publication behaviour

N = 120

Sr. No.	Level of publication behaviour	No. of Agril. Scientists	Percent
1.	Low level (<1 83. 55)	82	68.33
2.	High level (>1 83. 55)	38	31.87
	Total :	120	100.00

Mean=183.55

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

Relationship between profile of the agricultural scientists and their publication behaviour

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

Table 3 : Relationship between profile of the agricultural scientists and their publication behaviour

Sr. No.	Variables	V 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	0.10770 NS
11.	Editorial involvement	0.65597*
12.	Types of publication	0.37437*

* Significant at 0.05 per cent probability
N.S. = Non-significant

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, award, training, scientific interaction, reading behaviour, 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 coefficient values(r) were found 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 is 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 (0.0305), education (0.0701), attitude (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), training (0.2289), age (0.2170), attitude (0.1875), reading behaviour (0.1804) and motive (0.1094).

Table 4 : Direct and indirect effect of profile of the agricultural scientists and their publication behaviour

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	0.5139	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

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 traits 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 a result of the study, it could be concluded that the publication behaviour of the scientists is low as more than two - third of the scientists had low level of publication behaviour. The 'own interest' was the prime motive 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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