

A STUDY ON MOTIVATIONAL LEVELS OF AGRICULTURAL OFFICIALS

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One of the most important challenges faced by research management, is to motivate scientists and sustain their motivation for productivity and excellence. Motivation is a term, which denotes the willingness of employees to expand effort and exhibit desired pattern of work behavior in terms of levels of performance and commitment to the work (Molonder and Winterton, 1994). Such a concern for excellence is called personal achievement motivation. Most of our research organizations are hierarchical in structure where scientists and team leaders have a crucial role to play in motivating their subordinates and junior scientists. Productivity of technology and scientific innovations are no doubt important, but scientists' capability to meet national and social needs, adequate safeguard to the production resources and natural balance, is of much greater importance. Such human and social concerns in scientists are governed by, what is known as social achievement motivation. Thus, it is clear that scientists require motivation for social achievement *i.e.*, a concern for improving quality of life of people with the help of science and technology. It involves proactive orientation towards others' sense of vigilance and awareness of peoples' needs and problems. It is a concern for excellence at the work as well as in life, involving social wellbeing. Such a concern could motivate the scientists to think of such technologies and practices, which could result in better life for people. Such a concern has to percolate to all levels in an organization so that the work climate itself becomes social achievement oriented.

Influence motivation is another important motivational dimension, which is related with scientists' productivity and performance. Influence motivation is a desire for influencing other people and surrounding environment. In any

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research organizations, scientists should have concern not only for personal excellence but also for providing guidance and leadership. This kind of motivation is more important for research managers, who are required to mobilize others to march on the set path and move towards the goal.

A fire of influence motivation will help the scientists in uplifting the poorest section of the community since the process of socio-economic development requires exertion of influence on them to help them assert against exploitation. This will help the disadvantaged section of community in articulating their problems in an efficient manner and influencing decisions for their advantage. An attempt was made in the present investigation to explore the personal and social achievement as well as influence motivation of agricultural scientists. The motivational profile of the officials so obtained would help see the to competence and capabilities and would also provide an insight improving into their motivational strength to help them perform their roles with greater efficiency.

Methodology

While studying the Indian situation, Sethy (1982), Sadangi (1991), Bhargava (1984) and several other researchers were of the opinion that Thematic Apperception Test (TAT) was the best measure of motivation since it is an operant measure, all other measures are respondent type. Response to a question is generally cognitive and not affective whereas motivation is essentially affective in nature. It was, therefore, decided to use TAT type instrument to measure personal achievement, social achievement and influence motive of the respondents in the present investigation. The instrument consisted of four TAT type pictures developed by Mehta (1976, 1994), which were used to elicit fantasies and imageries in the form of stories. These stories were then scored to empirically assess the motive strengths of the respondents as per the scoring manual developed by Mehta (1994). For the present study, data was collected from eighty agricultural scientists/officials from ICAR institutes and SAUs with the help of TAT type picture developed by Mehta (1994).

Findings and Discussion

Each of the selected 80 respondents produced four fantasies (stories), which were first scored for presence of three motives - personal achievement, social

achievement and influence. Each motive has eight sub-categories - personal action (Ap), social action (As), anticipated action (Aa), strength (St), hope (H), personal and social awareness (Psa), vigilance (V) and thema (Th). Each of the motives and their sub-categories were assigned a score of 1 each. Hence one fantasy (story) can theoretically yield a score of 9 and the four fantasies can together yield a score of 36. Hence a respondent can obtain a score between 0 to 36. However, the motive scores obtained by the selected respondents varied for the three motives, which were much below the obtainable scores. The scores so obtained by them are presented in table 1 below.

Table 1: Distribution of personal achievement, social achievement and influence motivation scores obtained by Agricultural officials

Motivation Score	Frequency Personal Achievement	Social Achievement	Influence Achievement
0-2	13 (16.25)	36 (45.00)	20 (25.00)
3-5	45 (56.25)	37 (46.25)	35 (43.75)
6-8	15 (18.75)	04 (05.00)	23 (28.75)
9—11	07 (08.75)	00 (00.00)	02 (02.50)
12 - 14	00 (00.00)	03 (03.75)	00 (00.00)
N	80	80	80
Mean	4.362	2.613	4.025
SD	2.611	2.698	2.256
Range	0 to 11	0 to 13	0 to 10

*Figures in parentheses indicate percentages.

As reported in table 1, personal achievement motivation score of farm scientists ranged from 0 to 11 against a possible range of 0 to 36. The mean personal achievement score of the group was 4.3 62 with standard deviation of 2.611. This shows a wide variation in the personal achievement levels of the respondents. It further reveals that 16.25 per cent of the total respondents had scored between 0 to 2, 27.5 per cent of them above 6 where as majority of them *i.e.*, 56 per cent obtained a score between these two extreme categories (score 3 to 5). Large standard deviation made

it difficult to classify them into low, medium and high category based on the classification criterion of $M-1SD$, $M \pm 1SD$ and $M+1SD$. The overall picture related to personal achievement showed that farm scientists have in general lower level of personal achievement motivation and there is wide variation among them. It appears that farm scientists in general have low concern for standard of excellence and quality performance. They engage themselves in performance and seldom make efforts for extra-ordinary accomplishment.

The data in Table 1 also shows the distribution of social achievement motivation score of agricultural scientists. It ranges from 0 to 13 with a mean of 2.6 out of the maximum obtainable score of 36. This shows that the social achievement motivation level of scientists was poor. The mean of social achievement score was 2.613, with standard deviation of 2.698. This shows that there was a wide variation in the motivation level among agricultural scientists with many crowding the lower pole of the scale. 'While 45 per cent of scientists received the score between 0-2, only 8.75 per cent received the score between 6-14. The overall picture that emerges from this is that farm scientists have very low level of social achievement motivation and there is a wide variation among them.

The distribution of influence motivation scores obtained by agricultural scientists ranged from 0 to 10 with mean of 4.025 and SD of 2.25. The need to influence was also on the lower side among the agricultural scientists but is very close to the level of need for personal achievement. 'While 25 per cent of scientists had motivation level of 0-2 score, 31.25 per cent of scientists received a score between 6 to 11. About 44 per cent of scientists received a score between 3 and 5 on influence motivation scale. With striking similarity between personal achievement and influence motives, it appears that agricultural officials have relatively higher concern for self-achievement and assertion (influence) but, little concern for the well being of the society. Agriculture, in fact, is an applied science directed towards the welfare of the farming community, but it is strange that the scientists have the lowest orientation towards that.

Sub-Categories of Personal Achievement Motivation

The data was reset to report the scores on various components of personal achievement motive (subcategories) obtained by the agricultural officials as given in table 2.

Table 2: Sub-categories of personal achievement motivation of respondents.

Sub-Categories	Frequency
Total Stories	320
Stories with PAI	106 (33.10)
Personal action (Ap)	103 (97.17)
Social action (As)	010 (09.43)
Anticipated action (Aa)	005 (06.72)
Strength (St)	014 (13.20)
Hope (H)	006 (05.66)
Personal Social Awareness (PSA)	024 (22.64)
Vigilance (V)	004 (03.77)
Thema (Th)	067 (63.20)

Figures in parentheses indicate and the percentage of stories containing sub-categories was calculated out of the stories having motivation imagery.

It may be reported here that only about 33 per cent of stories written by the agricultural officials contained personal achievement imagery. The data reported in table 2, indicates a wide variation in verbalizing various sub-categories of achievement motivation. This is discussed under the following sub-heads.

Personal and social Action

The data reported in Table 2 show that this sub-category was consistently verbalized in most of the stories (about 98 per cent). The reason for the highest number of stories containing personal action is quite understandable, as some overt and/or covert personal action is required to achieve the personal achievement goal. It is interesting to note that while 97.17 per cent of the stories contained the personal action, only 9.43 per cent of them showed

social action. This suggested that the personal achievement motivated extension scientists and officials are strongly self-action oriented, and they think much less about collective and team action. Agricultural Extension performance does require collaborative teamwork, hence, the need for social action. This underlines the need for training to raise their awareness and willingness for taking collective actions.

Strength

Only 13.2 per cent of stories written by the agricultural extension scientists and officials articulate 'strength'. A scientific pursuit does require strengths like imagination, perseverance, hard work etc., but it appears that agricultural scientists who do have these strengths are not sensitive to them.

Personal social awareness

Awareness about one's own shortcomings and about social/environmental difficulties/blocks is important for achieving success and excellence. However, the data reported in Table 2 reveals that about 23 per cent of stories contained cue for PSA. Thus, a large number of scientists did not think of their blocks located in self or in the environment, which could impede achievements in real life situation.

Hope

Hope was another weakly articulated sub-category. Only about 5.66 per cent of the stories scored for personal achievement contained this sub-category. It was difficult to say why it was so, was it due to their own lack of optimism or due to the possible poor work environment? May be, it was due to both.

Anticipated action and vigilance

The case of sub- category, anticipated action (4.72 per cent stories containing the cues) and sense of vigilance (only 3.77 per cent of the stories containing the cues) is similar. It indicates that even the achievement oriented extension scientists and officials were not pro-active and were rather complacent in their thinking about achievement.

The above account of personal achievement motivation of agricultural scientists shows that the need came out to be rather low as most of them failed to verbalize motivational components like social action, anticipated action, strength, hope, personal social awareness and vigilance. Thus, an organized effort to heighten their motivational level requires to be made through motivational training in which special attention must be paid to inculcate in them these components of motivation language.

Sub-categories of social achievement motivation

As in the case of personal achievement motivation, the scale to measure social achievement motivation also has the same set of seven sub-categories such as personal action, social action, anticipated action, strength, hope, personal social awareness and vigilance. The data obtained on different sub-categories as reported in Table 3 reveals that 66 per cent of the respondents verbalized the dimension of social action followed by 39 per cent for personal action and 25 per cent for personal and social awareness. Verbalization of other subcategories was very low - almost negligible - with vigilance getting a zero score.

Table 3: Sub-categories of social achievement motivation of Agricultural Scientists.

Dimensions	Frequency
Total Stories	320
Stories related to SAI	71 (22.20)
Personal action (Ap)	28 (39.44)
Social action (As)	47 (66.20)
Anticipated action (Aa)	02 (02.81)
Strength (St)	03 (04.22)
Hope (H)	05 (07.04)
Personal Social Awareness (PSA)	18 (25.35)
Vigilance (V)	00 (00.00)
Thema (Tb)	35 (49.30)

Figures in parentheses indicate percentage of stories containing sub-categories calculated out of the stories having social motivation imagery.

It is a matter of concern that Extension Scientists, who are professional change agents with socioeconomic development of farming community at the top of their agenda, showed such a low need for social achievement. As discussed earlier, this suggested the need for a serious review of the postgraduate education system and organizational climate of the agricultural institutes and state agricultural universities in India. This also points to the urgency of exposing extension scientists to motivation development courses with special emphasis on personal as well as social achievement need and on the inculcation of the various motivational components.

Sub-categories of influence motivation

As in the case of personal achievement and social achievement motivation, the sub-categories in case of influence motivation were equally low. The data reported in Table 4 reveals that in the stories scored for this need, the presence of personal action was the highest (93.91 per cent), followed by social action (13.91 per cent), personal social awareness (10.43), strength (4.35 per cent), hope (2.61), and vigilance (1.74 per cent). No story articulated the sub-category of anticipated action.

Table 4: Dimensions of influence motivation of Agricultural Scientists.

Dimensions	Frequency
Total Stories	320
Stories related to Inf	115 (35.93)
Personal action (Ap)	108 (93.91)
Social action (As)	016 (13.91)
Anticipated action (Aa)	000 (00.00)
Strength (St)	005 (04.35)
Hope (I-I)	003 (02.61)
Personal Social Awareness (PSA)	012 (10.43)
Vigilance (V)	002 (01.74)
Thema (Th)	061 (53.04)

Figures in parentheses indicate percentage of stories containing sub-categories calculated out of the stories having influence imagery.

The data clearly indicates that in case of motivation status, influence motivation of agricultural scientists is very low. Also it is interesting to see that the influence motivation of agricultural scientists contains mostly personal action (93.91 per cent), while other sub-categories like social action, personal social awareness etc. are low. Another interesting thing to note from the data is that influence motivation of agricultural scientists lacks personal social awareness, strength, hope, and vigilance which is otherwise essential for a functional influence motivation. This findings, therefore, provide cues on raising the influence motivation of Extension Scientists so that they may become better professionals.

Conclusions

A vast majority of agricultural scientists as well as extension functionaries operate under low level of motivation due to various organizational and personal factors. Even a small increase in motivational level of scientists will result in achievement of higher scientific productivity. In the coming years, due to resource crunch there will be emphasis on improving the present human resources for research organizations to maintain a competitive edge in the emerging environment. Therefore today, increasing the motivational levels of scientists to improve their research and extension productivity is of paramount importance.

References

- Bhargava, V. P. (1984) Measurement of Motivation, *DEI Research Journal of Education and Psychology*, 2(1): 14-18.
- Mehta, P. (1976) Scoring TAT stories for Motivation — A manual, Participation and Development Centre, New Delhi.
- Mehta, P. (1994) Social Achievement Motivation: Needs, Values and Work organization, Concept Publishing Company, New Delhi.
- Molander, C. and Winterton, J. (1994) Managing Human Resources, Roulledge, London and New York.
- Singh, Neeraj (1997) Motivating and Empowering Agricultural Scientists for facilitative and people oriented development activities - An action research, Unpublished Ph. D. Thesis, JARI, New Delhi.