

Full Length Research Paper

Study personal characteristics of agriculture extension workers in North of Iran

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Accepted 5 April, 2012

It is quite evident that efficient extension workers play a crucial role in the success of extension programs. This study was conducted in Guilan province, Iran, and the statistical population of which the entire agriculturalist worked at least one year as an agriculturalist in Jihad-Agricultural organization in Guilan. Data collection was done through a questionnaire assessing extensions and Edward personality priority test (EPPS) using Murrey's (1938) manifest needs questionnaire as the foundation for item making. The top and successful extensions whose assessment scores exceeded the average score of the average population were separated. The results obtained show that the most prominent traits of the extensions working in this province were tolerance, effort, progress, perseverance, and discipline, respectively. All such traits were observable among the successful extensions except the order of which were tolerance, discipline, and perseverance; whereas unsuccessful extensions showed traits like tolerance, discipline, and selfishness (sense of superiority). All three groups had the traits "show off" as their last trait in order according to the questionnaire and their performance. Finally, it can be said that perseverance, discipline, and autonomy were three major traits that distinguished successful extensions from unsuccessful ones.

Key words: Personal characteristics, extension workers, North of Iran.

INTRODUCTION

Development and growth in an economic and social context had been paid attention to by economists on the one hand and by socialists and other researchers of some sciences such as geography on the other hand, and has become the base of planning. A permanent problem in the study of the economic development literature and social changes is to recognize the concept of development and growth (Ghadir et al., 2004). The word 'development' has different definitions and interpretations. Some economists and researchers are of the view that development is the increase of production efficiency, promotion of life quality and quantity level,

removal of poverty and privation, promotion of health and therapy service level, removal of unemployment problems and inflation and providing socio-economic requirements. In fact, development influences our daily living. The ideal meaning of development is to improve all living quality (Khakpour, 2006). In Iran, 23 million people are earning directly from agriculture and nearly 3.5 million of active population is working in this sector.

Extension workers' role in developing countries is to transfer agricultural technologies to clients in order to increase productivity. Although, majority of extension workers transfer technical innovations to rural people, extension is known as a human system. Extension therefore, is a human process as well in which technical information are used to help rural people achieve their potentials (Tiraieyari et al., 2011).

Many years ago, when agricultural sciences were

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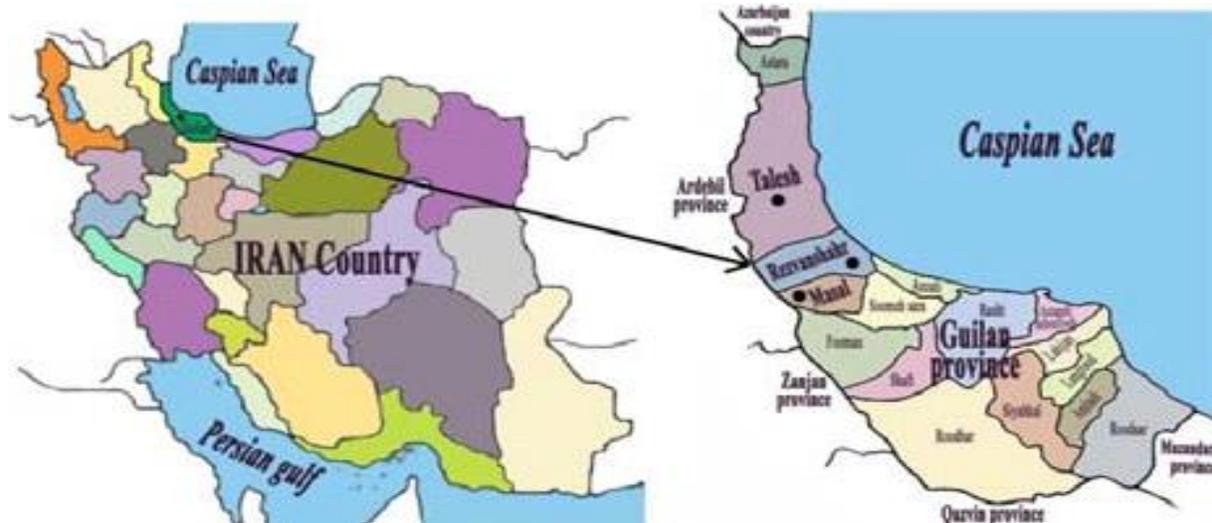


Figure 1. Site of study.

introduced in Iran, the newly educated agricultural engineers tried to transmit their knowledge and skills to farmers who had learnt farming from their fathers and grandfathers. They thought this would be easy. These farmers, however, did not allow new technologies to come into their farms. They believed that the power of their own hands was more than the words of young engineers with books. This new generation planned a better future for the farmers, in which machines would replace manpower and cow power, a world with more crops per drop. But an actual relationship between farmers and scientists did not exist until a group of agricultural engineers communicated with ethnic farmers in a relationship of equity and equality, by having them participate in creating special connections between different kinds of knowledge. This group was called agricultural extension engineers (Rahimi, 2000).

However, initial work in extension took place in 1949. At that time, the government contributed considerably to the formal establishment of public extension sector. Assistance was also provided by US government (Malek, 1998). Extension education is a beneficial aspect of life, which besides being organized, is calm, peaceful and welfare oriented. Philosophy of extension education encourages a person to bring about his own development and that of society through his own leadership and motivation by following scientific approach and democratic ways. It further states that the interest of the community should not suffer because of personal interest. In other words, philosophy of extension education considers development and progress of individuals as a foundation for the development and prosperity of the family, society and the country.

Dhanakumars (2001) and Linders (2001) reported that performance and extension competencies are positively related. According to Heffernan and Flood (2000), there is

a positive relationship between competencies and performance. Similarly, Armstrong (2006) stated that competencies are factors that contribute to high levels of individual and organizational performance. Previous studies have identified various competencies thought to be needed by extension workers in agricultural extension education in the areas of extension process, human development, educational processes, teaching strategies, program planning, implementation, and evaluation, teaching decision making skills to clients, develop volunteer leaders, ability to work with key leaders and communication skills (Tiraieyari et al., 2011; Cooper and Graham, 2001; Miller and Cox, 2006). It was found that these competencies should be possessed by extension workers in order to effectively perform their roles. However, few studies have examined the relationship between human development competencies and extension workers' performance (Thach et al., 2008; Khalil et al., 2008). This study aims to answer the question of whether or not there is a significant difference between successful and unsuccessful agriculturists in terms of personality traits according to Murray's theory in order to provide a profile of successful agriculturists.

MATERIALS AND METHODS

Through causal comparative (cause/effect) research method, the extensions' personal traits were considered as independent variable and their success/failure as the dependent variable of the research. The statistical population of the research is the entire extension working officially at least one year in the position of agriculturalist in Jihad/Agricultural organization in Gilan province, North of Iran (Figure 1). To collect the required data, both the evaluation questionnaire for extensions (to separate successful/unsuccessful groups) and Edwardz's personality priority (EPPS) were used. The latter test (EPPS) was made in 1959 to measure 15 personality traits for counseling and research purposes. It has 210 two-choice

questions. The pre-requisite understanding of the items of such a test is Murray's (1938) manifest needs questionnaire prepared in Harvard psychology clinic. The extensions assessment questionnaire consists of four parts carried out in thirty closed-ended questions which were answered in a five-choice ranking scale. In this questionnaire, some traits such as patience humility, explanation power (good speech), ideal flexibility, awareness of duties etc. were given to superior experts to answer. According to the results (scores), successful extensions (those who got more score than the average extensions) were separated from the unsuccessful ones, and the validity of the questionnaire was measured through test-retest method. To obtain the validity of EPPS in addition to factor analysis and internal correlative matrix among variables, two kinds of correlations were checked for subject selection and split-half method was used to measure its reliability. For data analysis in addition to mean comparison, frequency percentage and standard deviation of successful and unsuccessful extensions, t-test scores were used to compare the means of the two independent groups.

RESULTS

The results of this study are shown in Table 1:

a) The average (mean score) of the extensions of this province in different traits were as follows: effort and progress (15.41), obedience (13.95), order and discipline (15.36), show off (8.44), autonomy (10.06), outgoing (9.31), accuracy in observing others behavior (14.16), affection seeking (10.86), superiority seeking (12.95), feeling humble (13.12), affection (14.43), variety seeking (13.95).

However, the successful extensions got the following scores: effort and progress (52.77%), obedience (63.88%), order and discipline (47.22%), show off (47.27%), autonomy (45.83%) outgoing (50%), accuracy in observing others behavior (48.57%), affection seeking (52.77%), superiority seeking (51.38%), feeling humble (50%), affection (47.22%), variety seeking (54.16%), tolerance (55.55%) and being quarrel some (48.61%). As aforementioned, they got more scores than the average province score:

b) The successful and unsuccessful extensions performed in different traits are subsequently shown. The aforementioned scores were more than province mean according to the results obtained from Table 1 mean ranking for personality traits of extensions were computed regarding Edward's test and they were compared in table number 2. As shown in Table 2, the major personality traits of extensions in this province according to their scores and mean were obtained respectively as follows: tolerance (19.33), order and discipline (18.12), effort and progress (16.42), effect (15.12), obedience (14.13), accuracy in observing others' behavior and variety seeking (13.97), humble feeling (12.10), superiority seeking (11.58), autonomy (10.89), quarrelsome behavior (10.44), affection seeking (9.76), outgoing (9.16), and shown off (8.51).

c) The major personality traits in unsuccessful extensions are as follows according to their acquired mean scores: tolerance (17.09), discipline (15.36), superiority seeking (14.57), accuracy in observing others' behavior (14.39), humble feeling (14.33), effort and progress (14.24), being quarrelsome (13.60), affection seeking (12.15), outgoing (9.48), autonomy (9.09), and show off (8.36).

According to mean scores, the major traits in such extensions are tolerance, effort and progress, and discipline, all of which are observable in successful extensions except that the order of theirs is tolerance, discipline, and effort and progress. However, unsuccessful extensions got maximum mean scores in tolerance, discipline, and superiority seeking respectively and on the other hand, show off was the last trait in order of ranking by the three groups that is, the province extensions, successful extensions, and unsuccessful extensions.

As indicated in Figure 2, the mean of successful extensions in the effort and progress trait (16.42) was significantly more than that of unsuccessful extensions (14.24). Moreover, successful extensions got more scores in the trait discipline than those of unsuccessful extensions such that it claimed 99% out of 100% certainty; as such, their mean scores in order and discipline trait (18.12) exceeded those of unsuccessful extensions, that is, 15.36. There was no significant difference in traits like obedience and show off between these two groups but extensions mean score in autonomy trait (10.89) was significantly more than that of unsuccessful ones that is, (9.09). Consequently, successful extensions performed better than unsuccessful ones in personality traits like effort and progress, discipline, and autonomy.

Considering the duties of extensions, emphasis is laid on the necessity of such traits and the existence of their behaviors. Duties and operations such as annual scheduling, preparing agricultural calendar, time-depending agricultural operations such as plant storing, garden establishment, choosing appropriate time for pest fighting, keeping and recording diaries, preparing identity documents for villages, efficient use of office equipment and maintenance are vital for extensions. The nature of agriculture on on-the-spot decision making, continuous activities, continuous interaction with farmers, and selection and optimization of technical instruction according to farmers' age require innovation and avoidance of bureaucracy. As a result, the agriculturalist's autonomy dimension to present innovations gets highlighted. Willingness for new and various experience, dignity, self-importance, and leisure for a decent position function as integrative motivation in human's life and job selection. Extensions who are highly motivated for progress use their time and idea for the betterment of affairs. Such characteristics are obtained through motivation for progress and promotion and extensions try to show their

Table 1. Quantitative data for extensions in Guilan province according to Edward's personality test.

Variable	Total number of extensions in province			Successful extensions			Unsuccessful extensions		
	Minimum score	Maximum score	Mean	Minimum score	Maximum score	Mean	Minimum score	Maximum score	Mean
Personality traits				Frequency percentage over mean			Frequency percentage over mean		Frequency percentage over mean
Effort and progress	7	22	15.41	52.77	21	16.42	8	22	14.24
Obedience	7	21	13.95	63.88	20	14.13	7	21	13.76
Order and discipline	4	24	15.36	47.22	24	18.12	4	23	15.36
Show off	3	16	8.44	47.27	16	8.51	4	15	8.36
Autonomy	2	17	10.06	45.83	17	10.89	2	16	9.09
Outgoing	2	18	9.31	50	16	9.17	3	18	9.48
Accuracy in observing other's behavior	4	23	14.16	48.61	23	13.97	4	22	14.39
Affection seeking	2	19	10.86	52.77	19	9.76	2	19	12.15
Superiority seeking	5	21	12.95	51.38	21	11.58	8	21	14.57
Feeling humble	2	21	13.12	50	21	12.10	6	21	14.33
Affection	5	22	14.43	47.22	21	15.12	5	22	13.6
Variety seeking	7	21	13.95	54.16	19	13.97	9	21	13.94
Tolerance	10	25	18.30	55.55	24	19.33	10	25	17.09
Being quarrelsome	4	22	12.05	48.61	20	10.44	7	22	13.96

merit during interaction with farmers.

Agriculturists' progress and promotion help them to be accepted and trusted by farmers, hence they can organize their clients' activities and this ultimately leads to their job satisfaction, which in turn increases their efficiency and performance.

According to Figure 2, it is implied that; the score of

outgoing trait in unsuccessful extensions which was 9.48 exceeded the mean score of successful extensions that is, 9.17. However, this does not indicate a significant difference among them in this regard. Undoubtedly, the agriculturalist is required to communicate continuously with the farmers in any moment of his presence in the village. In other words, interest in communication and

Table 2. Mean ranking according to personal traits priority in extensions on EPPS.

Variable	Total number of extensions in province			Successful extensions			Unsuccessful extensions					
	Minimum score	Maximum score	Mean	Frequency percentage over mean	Minimum score	Maximum score	Mean	Frequency percentage over mean	Minimum score	Maximum score	Mean	Frequency percentage over mean
Effort and progress	72	15.41	15.80	2	39	16.42	16.72	3	33	14.24	14.90	6
Obedience	72	13.95	14.38	6	39	14.13	14.57	5	33	13.76	14.37	9
Order and discipline	72	15.36	16.05	3	39	18.12	16.46	2	33	15.36	15.80	2
Show off	72	8.44	9.14	13	39	8.51	9.21	13	33	8.36	9.21	14
Autonomy	72	10.06	10.69	11	39	10.89	11.47	9	33	9.09	9.87	13
Outgoing	72	9.31	10.45	12	39	9.17	10.68	12	33	9.48	10.33	12
Accuracy in observing other's behavior	72	14.16	14.83	5	39	13.97	14.62	6	33	14.39	15.29	4
Affection seeking	72	10.86	12.10	10	39	9.76	11.17	11	33	12.15	13.30	11
Superiority seeking	72	12.95	13.65	8	39	11.58	12.33	8	33	14.57	15.26	3
Feeling humble	72	13.12	13.88	7	39	12.10	12.98	7	33	14.33	15.08	5
Affection	72	14.43	14.84	4	39	15.12	15.64	4	23	13.60	14.08	10
Variety seeking	72	13.95	14.36	6	39	13.97	14.49	6	33	13.94	14.43	8
Tolerance	72	18.30	18.59	1	39	19.33	19.69	1	33	17.09	17.52	1
Being quarrelsome	72	12.05	12.82	9	39	10.44	11.29	10	33	13.96	14.60	7

sociability is a job requirement rather than a personality trait. Moreover, it can be said that an agriculturalist's

career is inherently associable with a job in which an individual who is more willing to work with others will be

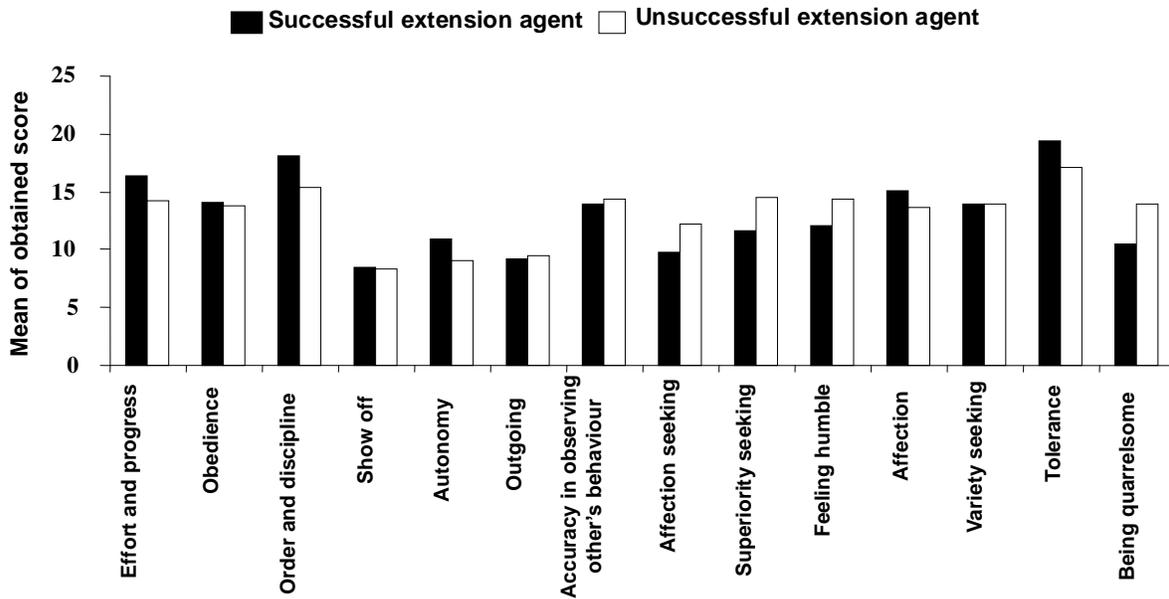


Figure 2. Compares two means in two group of extensions.

more successful professionally. Successful extensions and unsuccessful extensions have no significant difference in terms of accuracy in observation of others. This can be justified due to human's nature and an agriculturalist's career. In addition, mean score of unsuccessful extensions, that is, 14.57 exceed that of successful ones on trait superiority seeking which are 11.58. However, a significant difference was seen among these two groups on humble feeling since the mean score of unsuccessful extensions in this regard are 14.33 in comparison with that of successful ones which is 12.10.

Successful/unsuccessful agriculturalist

In agricultural psychology, it is expected that any activity should be in accordance with instructional farmer's (learners) needs, interests and wishes. Farmers (learners) need to express themselves as a result they resist bully, and if extensions feel humble or superior, the clients lose their mental balance. Unsuccessful extensions with signs of humbleness may suffer from selfishness in future, so these abnormalities disturb the mental balance of their clients. Those coward extensions tend to bully clients later, hence since they neglect the principles of agricultural psychology in giving their services, they are unable to communicate efficiently. The aforementioned findings are in agreement with those of Leu and Guinea (1995) and Moatadel (1996). Leu and Guinea (1995), believed that if the agriculturalist does not praise his client, he should surrender his career. They added that educated extension workers who looks down on illiterate and have high expectations cannot communicate with the farmers. Such extension workers

need more empathy and assimilation with their clients if they desire relative success.

Successful/unsuccessful agriculturalist

When the two groups of extensions were compared (Figure 2), it was observed that the mean of successful extensions (15.12) exceeded that of unsuccessful ones. However, no significant difference was observed on the trait superiority seeking between the two groups. The successful extensions' mean on the trait tolerance (19.33) exceeds that of unsuccessful ones significantly, whereas unsuccessful extensions were shown to be more quarrelsome than successful extensions because the farmer group was 13.96 in comparison with that of the latter group which was 10.44. Consequently, some traces of destructive traits which are destructive to human relationship are observable among unsuccessful extensions. Previously, Amirani and Iravani (1992) in a research called "The study of factors influencing the Adult Instructors" had realized that ethical traits like kindness, Patience and gentleness had brought success to those instructors up to 90% out of 100. Abadi and Ahmad (1995) believed that the experimental research carried out in Australia on ethnic immigrant farmers has shown that extensions through personal interest and friendly relationship with farmers are based on trust and reliance. In fact the reason behind the success of extensions' in this region has been their empathy with local farmers and creating a positive atmosphere to have dialogue between the farmer and the agriculturalist.

According to opinions of the respondents, the most important competencies needed by the extension workers

specialized in animal husbandry are as follows: skill in observing and maintaining hygiene in the livestock environments; observing timely livestock vaccination; ability to apply educational media, endeavor and perseverance in work; feeling of responsibility as well as accountability, familiarity with the principles of adult education; being familiar with and aware of animal husbandry related laws and regulations with the ability as to their proper application (Asadi and Shams, 2003).

Asadi et al. (2008) in this study found that the majority of the extension workers (65.5%) belonged to intermediate level of job satisfaction, followed by 29.1 and 5.5% belonging to high and low level of job satisfaction, respectively. Regression results also indicated that the full model was moderately successful, explaining 45% of the variances in the job satisfaction. Two independent variables that accounted for the explained variances were monthly salary (27%) and marital status (18%).

Suggestions

1. Awareness of clients' needs and some personality traits in instructors such as tolerance, effort and progress, success, affection, discipline, autonomy and avoidance of some negative traits like quarrelling, selfishness (superiority seeking) to wardens (humble feeling biased on EPPS) can develop and evolve the agriculturalist instruction.
2. The employed extensions are required to go to some valid counseling clinics to detect their potential talents to improve them towards the betterment of the quality of their services.
3. The outcomes of this study can be applied to increase motivation in extensions.
4. Some traits like tolerance, effort, achievement, affection and discipline etc. should be considered while recruiting new instructors (extensions).
5. The new outcomes and similar ones can be use develop the syllabus of informal and agricultural instructional psychology.

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