Gender Variation in Role Perception of SMSs in Krishi Vigyan Kendras

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Paper Received on May 22, 2015, Accepted on September 23, 2015 and Published Online on October 20, 2015

ABSTRACT

Gender variation in role perception of Subject Matter Specialists was studied in Punjab, Haryana and Himachal Pradesh. Twenty KVKs from these states selected proportionally and including all subject matter specialists (Male-63, Female-34) as respondents. Scale developed by Kumar (2015) was used to measure the role perception of SMSs of KVKs. Findings revealed that male to female SMSs ratio was highest (50.00%) in Punjab and least in Haryana (16.13%). In most of the dimensions of role, no significant difference was found in perception of male and female SMSs except front line demonstrations and management where male SMSs had higher role perception than females. In case of overall role perception of the male and female respondents, majority of the male respondents (44.44%) were having high role perception, about 38 per cent belonged to medium role perception category and about 1/5th of the respondents were having low perception. Majority of the female respondents (38.23%) were falling equal both in high and medium role perception category and about 1/4th of the respondents were having low perception. In comparison, male SMSs have apparently high role perception than females. But output of the statistical tests revealed no difference between male and female SMSs as far the overall role perception was concerned.

Key words: Role perception, Subject Matter Specialists, Krishi Vigyan Kendra, Role segments;

Krishi Vigyan Kendra (KVKs), an emerging extension model ultimately aims to the socialization of agro-technology with a view to uplift the socio-economic condition of the people with the help of eco-friendly agro-technology in a sustainable manner along with a system approach (Pradhan and Mukherjee 2012). With the consolidation of other front-line extension projects of the Council during the Eighth Five Year Plan, the mandate was revised to take up on-farm testing, long term vocational training, in service training for grass root level extension workers and front-line demonstrations on major cereal, oilseed and pulse crops and other enterprises (Venkatasubramanian et al 2009). But the application and compliance of latest and crystal clear mandates of KVK has become another challenge. Subject Matter Specialists (SMSs) of KVKs has to play many roles as per the requirement of job.Agricultural education and service field was traditionally supposed to be the domain of males. Very

little involvement of female was there initially in this field. But now days like other fields, agriculture education has embraced women. As a result in agriculture service sector there is increase in number of women and growing day by day. KVKs are also being served by a number of females now.

However being different from men in many terms, difference might be observed in perception of females about the roles performed while working in KVKs as that of males. Perception refers to the way we try to understand the world around us. It is the set of processes by which an individual becomes aware of and interprets information about the environment (*Anomymous*, 2015). It is very important to find out the role perception of the male and female SMSs of KVKs so that more role clarity could be achieved. So keeping this point in view the present study was conducted with the objective of determining gender variation in the role perception of SMSs of KVKs

METHODOLOGY

The study was conducted in the Punjab, Haryana and Himachal Pradesh states. There were twenty KVKs in the Punjab, eighteen in Haryana and twelve in Himachal Pradesh totalling to fifty KVKs. Out of these a total of twenty KVKs were selected using probability proportion to number to each state. Eight KVKs from Punjab i.e. Jalandhar, Fatehgarh Sahib, Ludhiana, Ferozepur, Kapurthala, Amritsar, Bhathinda, Mansa, seven from Haryana i.e. Sonipat, Panipat, Jind, Kaithal, Rohtak, Kurukshetra and Faridabad, and five from Himachal Pradesh viz. Kangra, Una, Bilaspur, Kullu and Mandi were selected randomly. For determining the role perception all the subject matter specialists total 97 (Male-63, Female-34) working in the selected KVKs were taken as the respondents. Scale developed by Kumar (2015) was used to measure the role expectation/perception of Subject Matter Specialists of Krishi Vigyan Kendras. The data were collected through mailed questionnaires and personal interview. The statistical analysis was done using tools such as mean, standard deviation, Mann-Whitney U test etc.

RESULTS AND DISCUSSION

Gender wise status of SMS: Data placed in Table 1 depicts the gender status of SMSs in selected KVKs of the study. It is quite clear that the Punjab state leads the tally (50.00%), if we look at the number of women SMSs in KVKs. Himachal Pradesh with a percentage of 33.33 came at second place. Haryana was the worst performer in this regard where only 16.13 per cent women were working as SMSs.

Table 1. Gender wise distribution of SMSs working in different states

State	Male		Female		Total
	No.	%	No.	%	
Punjab	21	50.00	21	50.00	42
Haryana	26	83.87	5	16.13	31
Himachal Pradesh	16	66.67	8	33.33	24
Total	63		34		97

Role Perception Regarding Organization of Trainings: It was observed from the data given in Table 2 that as far the different roles under organization of trainings are concerned, male respondents perceived the assessment of the training needs of the farmers of the district is most important (mean score 4.89) followed

by developing need based curriculum (mean score 4.84). Female SMSs also perceived on similar lines who reported training needs of the farmers of the district is most important along with delivering well prepared lectures to the trainees (mean score 4.85). Whereas use of proper AV aids were least (10th rank) perceived by males and arranging field trips to the demonstration sites, experiment fields and other relevant places (10th rank) by female SMSs. As most of the trainings conducted were short duration, field visits may not be so important because it seldom put any impact. Overall differentiation in perception of male and female SMSs under this role segment was worked out with Mann-Whitney U test. Z value of test indicates that there is no significant difference between the perception of male and female SMSs with regard to organization of trainings.

Role Perception Regarding On-Farm Testing: It is evident from the data presented in the Table 2 that both male and female respondents perceived the selection of location specific problems as most important. However forming appropriate research hypotheses was the least perceived role by females (8th rank) and applying appropriate statistical tools to analyse the data by males. Generally KVKs were known as extension institutes rather than research institutes. Here these least perceived roles were a core activity of research. Moreover the probable solutions to the location specific problems found by SMSs were not recommended directly by SAUs. They had to submit their research results to main research system of SAUs, which if found needed conduct research on those lines and after getting the promising results made recommendations. So in this whole process SMSs were not so motivated about forming appropriate research hypotheses and applying appropriate statistical tools to analyse the data. Further due to lack of analysis of data and due to overburden of other activities they might perceived publishing the findings of the on-farm-research trials among least. In this way these roles were least perceived by respondents. Overall differentiation in perception of male and female SMSs was find out applying Mann-Whitney U test and. Z value of -. 227 was obtained which indicated no significant difference between the perception of male and female SMSs as far the role perception regarding on-farm testing is concerned.

Role Perception Regarding Front Line Demonstrations: Data in placed in the Table 2 shows that in the role segment of front line demonstrations,

Table 2. Gender wise distribution of SMSs according to their role perception

Role Item	M	ale	Female	
	MS	Rank	MS	Rank
Regarding organization of trainings				
Assessment of the training needs of the farmers of the district	4.89	1	4.85	1.5
Developing need based curriculum	4.84	2	4.74	3
Use of proper AV aids	4.37	10	4.62	6.5
Necessary arrangements for the successful conduct of training	4.65	4	4.68	4.5
Delivering well prepared lecture to the trainees	4.65	5	4.85	1.5
Organizing discussion session for the better understanding of subject matter	4.54	7	4.68	4.5
Developing skills through practical field training	4.51	9	4.62	6.5
Arranging field trips to the demonstration sites, experiment fields and other relevant places	4.52	8	4.24	10
Measuring the impact of training programme	4.57	6	4.38	9
Modifying training programme on the basis of feedback received	4.78	3	4.53	8
Z = -0.227 (NS)				
Regarding on-farm testing				
Selection of location specific problems	4.89	1	4.82	1.5
Stating the objectives of the research clearly	4.73	5	4.68	5
Forming appropriate research hypotheses	4.38	7	4.32	8
Laying out the experiments properly	4.79	4	4.79	3.5
Inspection of field trials	4.87	2	4.79	3.5
Critically observing and recording data of trials	4.81	3	4.82	1.5
Applying appropriate statistical tools to analyse the data	4.29	8	4.56	6
Publishing the findings of the on-farm-research trials	4.51	6	4.44	7
Regarding front line demonstrations				
Getting thorough knowledge of technologies on which the FLDs are to be conducted	4.67	8	4.5	6
Developing a comprehensive plan for organizing the demonstrations	4.76	3	4.53	4
Proper selection of site for demonstration	4.84	1.5	4.65	1.5
Participatory approach in conducting demonstrations	4.6	10	4.5	6
Conducting survey to ascertain the SE conditions of farmers and farming situations	4.24	14.5	4.15	15
Conducting survey to find existing level of adoption of technologies and productivity	4.43	12	4.18	14
Organizing an orientation training on methodologies to be demonstrated for all the participating	4.24	14.5	4.21	13
Informing, all participating agencies/persons well in advance about launching of demonstrations	4.32	13	4.5	6
Supervising and guiding all important farm operations carried out by the demonstrating farmers	4.7	6	4.59	3
Organizing field day	4.71	4	4.29	11
Recording the information pertaining to different technological interventions adopted at Check plot	4.7	6	4.44	8
Keeping records of various expenses incurred and yields for deriving cost benefits	4.7	6	4.38	9
Monitoring on continuous and regular basis through visits to FLD plots,	4.84	1.5	4.65	1.5
Circulating the results of demonstration among all the personnel and demonstrating farmers	4.63	9	4.24	12
Publishing the success stories in popular extension journals, newspapers and magazines	4.57	11	4.35	10

^{*}Significant at 5%

proper selection of site for demonstration and monitoring on continuous and regular basis through visits to FLD plots were the most perceived roles by both male and female SMSs. Here interestingly, conducting survey to ascertain the socio-economic conditions of farmers and farming situations under which the crop is grown was the least perceived role both by males (14.5th rank)

and females (15th rank). Conducting survey to find existing level of adoption of technologies and productivity was among the least (12th rank) perceived roles in case of males and 2nd lowest perceived by females (14th rank) which was otherwise a primary and mandatory step of FLDs. The possible reasons behind this may be either they were not clear about the necessary steps

for conducting FLDs or might be over engaged in other KVKs' activities resulting in lack of full involvement in FLDs. Further it was verbal conveyance that every KVK should conduct at least 100 FLDs every year. So all the roles were not possible to play for so many FLDs keeping in view the limited manpower and only one vehicle for all KVK activities. In this way SMSs had to compromise with some of the most time consuming roles like surveys. Moreover there may be low aptitude among females about field survey work than males which might have led the respondents' perception on above lines. Mann-WhitneyU test yielded Z value of -2.68 which indicated a significant difference between the perception of male and female SMSs in case of role perception regarding FLDs. Further overall average depicted that male SMSs had high role perception than females in this segment. It may be due to the fact that FLDs are exhaustive and labour intensive job which require lot of field work. This factor might have caused the female SMSs to perceive differently than that of males.

Role Perception Regarding Programme Planning and Execution: Programme planning and execution is a basis of any extension project and so is of the KVK. Data in Table 3 reveals that implementing or helping in implementation of plan of work was the most perceived role by male respondents with mean score of 4.61 and drawing up of a suiTable plan of work by female respondents with mean score of 4.56. Here also one interesting observation was come out. ATMA, a core agency for the agricultural development of the district in present scenario, emphasizes on development of Strategic Research and Extension plan of the district (Anonymous, 2014). However the male SMSs of KVKs (a key stake holder of ATMA) kept it at the bottom (9th rank) and female SMSs also kept it among least (7th rank) perceived roles under this role segment. Reason behind this may be that the work of ATMA was still not properly channelized due to individual targeted activities of the constituent departments. Similarly there were mandated targets of KVKs which leave less time for collaborative work with other line Departments. As a whole no significant difference was found between the perception of male and female SMSs as revealed by Mann-Whitney U test.

Role Perception Regarding Subject Matter Authority: Information on role perception regarding subject matter authority is given in Table 3. The data in Table 6 clearly indicates that fully conversant with the agricultural

situation in the district w.r.t. area of specialization was most perceived role both by male and female SMSs (mean score 4.67 and 4.76 respectively), as far the role perception regarding subject matter authority was concerned. Overall differentiation in the role perception among male and female SMSs was found to be non-significant.

Role Perception Regarding Communication and Feedback: Role perception in this area was studied on different role items such as identifying the key communicators, using key communicators in the diffusion and adoption of agricultural innovations etc. It is quite clear from the Table 3 that serving as a channel of communication between university and farmers was the role most perceived by the female respondents and under role segment of communication and feedback, and informing the insect/pest outbreaks/attacks and other calamities which need emergency reporting to concerned authorities by male respondents. However they gave least importance to the role, giving feedback regarding the non-availability of certain inputs which hinder the adoption of new technology (by males) and giving feedback regarding cultural difficulty and attitude of farmers in adoption of new technology (by females). Findings were not in agreement with Ibrahim et al 2008 who reported that extension workers of Nasarawa Agricultural Development Programme (NADP) perceived knowing the technology and communication of the technology to the farmers as the most important role of the extension workers.

Role Perception Regarding Evaluation: Evaluation is important component of any programme and so is with KVK. Role perception of Subject Matter Specialists regarding evaluation was studied in six role items. Data placed in the Table 3 specifies that under the role segment of evaluation, the self-evaluation was most perceived role having a mean score of 4.72 by male SMSs and be knowledgeable about how to interpret the results by female SMSs with mean score of 4.71. Further evaluating the different individual activities of KVK was least perceived role (7th rank) both by male and female respondents which is otherwise could be considered as one of most important role. This may be due to that SMSs might be thinking that evaluation was not their business but the superiors should do evaluation with active involvement of SMSs. As a whole no significant difference was there between the perception of male and female SMSs as far the role segment of evaluation is concerned.

 ${\bf Table\,3.\,Gender\,wise\,distribution\,of\,SMSs\,according\,to\,their\,role\,perception}$

Role Item	Male		Female	
Role Itelli	MS	Rank	MS	Ranl
Regarding programme planning and execution				
Be knowledgeable about the results revealed through evaluation of the past years	4.44	7	4.38	5
Be knowledgeable about the steps and approaches of programmme planning	4.52	4	4.24	8.5
Collecting and analysing the facts pertaining to the agricultural production problems	4.48	6	4.47	4
Preparing the technical information collected for presentation to the head of the organization	4.43	8	4.35	6
Personal involvement in finding the suiTable solution to the problem/need of the area	4.6	2	4.53	2
Drawing up of a suiTable plan of work	4.57	3	4.56	1
Implementing or helping in implementation of plan of work	4.67	1	4.5	3
Reconsidering the plan in the light of results of evaluation of the programme	4.49	5	4.24	8.5
Development of Strategic Research and Extension plan of the Distt	4.38	9	4.32	7
Regarding subject matter authority				
Fully conversant with the agricultural situation in the district w.r.t. area of specialization	4.67	1	4.76	1
Serving as liaison with agricultural research in general and with his own discipline in particular	4.54	3	4.44	7
Maintaining close association/links/contacts with parent and other technical departments	4.52	4.5	4.56	5.5
Selecting, interpreting and making solutions to the specific problems	4.52	4.5	4.74	2
Attending professional meetings, conferences, seminars and workshops	4.44	6	4.59	4
Attending refresher training courses to update the subject matter knowledge	4.41	7	4.56	5.5
Reading periodicals, journals, magazines and other literature to get latest research developments	4.56	2	4.68	
Regarding communication and feedback				
Identifying the key communicators	4.67	2.5	4.47	3.5
Using key communicators in the diffusion and adoption of agricultural innovations	4.48	5	4.44	5
Giving feedback regarding the non-availability of certain inputs	4.46	6	4.47	3.5
Giving feedback regarding cultural difficulty and attitude of farmers	4.59	4	4.35	6
Informing the insect/pest outbreaks/attacks and other calamities	4.7	1	4.74	2
Serving as a channel of communication between university and farmers	4.67	2.5	4.88	1
Regarding evaluation				
Active involvement in evaluation of programme	4.75	2.5	4.65	2
Knowledgeable about steps involved in evaluation of a programme/ project	4.49	5	4.32	6
Acquaintance with use of results revealed by evaluation	4.41	6	4.44	5
Be knowledgeable about how to interpret the results	4.57	4	4.71	1
Self-evaluation	4.79	1	4.59	3
Evaluating the different individual activities of KVK	4.4	7	4.26	7
Impact analysis of KVK	4.75	2.5	4.53	4
Regarding management				
Understanding and practicing the concept of integration of teaching, research and extension	4.49	7.5	4.26	9
Observing the norms and standards set by the organization/ authorities	4.41	9	4.21	10
Developing and maintaining good relations with superiors, subordinates and associates	4.59	3	4.35	7
Developing contact with progressive farmers	4.7	1	4.5	2.5
Create team spirit through cooperation and coordination	4.68	2	4.5	2.5
Keeping close liaison with the staff of agricultural and allied departments	4.52	6	4.38	6
Keeping informed all concerned associates about what has been decided at organizational level	4.32	10	4.41	5
Establishing working relationships with small, marginal farmers and financial institutions	4.57	4	4.53	1
Stimulating the enthusiasm of people to take up agril. development on self-help basis	4.49	7.5	4.47	4
Effectively supervising the execution of the plan	4.49	5	4.32	8
Effectively supervising the execution of the pian	1.54	'	7.32	G

^{*} Significant at 5%

Role Perception Regarding Management: Management is an important aspect of any organization. Any programme can lead to desired output provided that it is properly managed. Critical examination of the data placed in Table 3 revealed that the role perception of SMSs of KVKs in the role segment of management. Under this dimension, developing contact with progressive farmers came out to be most perceived role by male respondents with mean score of 4.7, whereas establishing working relationships with small, marginal farmers and financial institutions by female respondents with mean scores of 4.53. However as a matter of surprise, observing the norms and standards set by the organization/authorities was the least perceived role which is otherwise one of the most important role (10th rank) by female respondents and also among least (9th rank) by male respondents. Perhaps SMSs were thinking in the present competitive world where they have to compete with NGOs and private players, the old norms and standards set by organization/authorities were not too relevant. Or they might be keeping different opinion about the norms and standards with that of organization/ authorities. Mann-WhitneyU test extracted Z value of -2.347 which revealed that role perception in role segment of management varied significantly between male and female respondents. Overall comparison of means yielded that male SMSs had higher role perception than female SMSs in this role segment.

Role Perception Regarding Service and Supplies: Services and supplies are soul of any extension programme. Without the services and supplies every extension programme will lead to a total failure. So the perception regarding this aspect was studied while taking different twelve role items into consideration. The figures in Table 4 reveals that helping farmers in difficult situation e.g. pest attack, epidemics, draught, flood, etc. was the most important role as perceived by both male and female respondents with a mean score of 4.78 and 4.76 respectively. It was quite expected result as farmers were in dire need of their help in those conditions. Here an important role i.e. providing services in collecting soil and water samples came out to be among the least perceived roles (9th rank) by female SMSs. Actually this is a discipline specific role of Soil Science, so the other scientists were hardly concerned with it especially the female SMSs who were predominantly from home science discipline. In case of male respondents, procuring and supplying fruit plants, seed etc as per the demand of the farmers was the least perceived role. Z value of the data depicted that there was no significant difference between male and female SMSs' role perception under role segment of services and supplies. Role Perception Regarding Office Work and Reporting: The perusal of Table 4 indicates that attending to visiting farmers and other visitors and dealing politely with them was the most perceived role item among different roles under office work and reporting segment bot by male and female SMSs (mean score 4.83 and 4.65 respectively). This was quite expected outcome. However assisting the office in the preparation of budget and other day to day work was the least perceived role responded by both male and female SMSs (9th rank). It was true that assisting the office in the preparation of budget and other day to day work was not the task of SMSs of KVKs with a note that they can submit their demands while budget preparations were going on. As a whole no significant difference was there in the role perception of male and female SMSs under role segment of office work and reporting.

Role Perception Regarding Supporting Activities: Role segment of supporting activities was given in Table 4. It clearly denotes that publishing the research/extension publications was widely perceived role both by male and female respondents (mean score 4.73 and 4.68 respectively) which was equally perceived with assisting the Programme Coordinators in holding Scientific Advisory Committee meetings by males. In the light of new career advancement scheme under the guidelines of ICAR, which emphasise greatly on the publications, the present outcome was not surprising. Whereas holding agricultural fairs (mean score 4.22 and 4.03 respectively) was least perceived role both by male and female respondents equally placed with arranging film shows for farmers by female respondents. This result is quite expected as holding agricultural fairs is a very time consuming task with not so much impact at KVK level and film shows are losing interest of the farmers these days in the sampled area. Overall differentiation in perception of male and female SMSs was find out applying Mann-WhitneyU test and. Z value of -1.817 was obtained which is nonsignificant at 5 per cent level. Hence no significant difference between the perception of male and female SMSs was there as far the role perception regarding onfarm testing is concerned.

Overall Role Perception of the SMSs: Overall role perception was calculated to know the perception of

Table 4. Gender wise distribution of SMSs according to their role perception

Regarding services and suppliesMSRankMSRankEnsuring supply of all agril. inputs required for demonstration, training and other purposes4.673.54.417Providing services in collecting soil and water samples4.4974.1212Providing diagnostic services4.4684.535Submission of indents well in time to ensure the supply of inputs4.4494.4493.5Ensuring the delivery of technical inputs to farmers before planting/sowing season4.7524.593.5Helping farmers in difficult situation e.g. pest attack, epidemics, draught, flood, etc.4.7814.761Collaborating with other deptt to providing services to farmers4.673.54.358Launching a special programme in case of epidemic4.654.593.5Procuring and supplying fruit plants, seed etc as per the demand of the farmers4.25124.329.5Joint touring with agril extension officers for the solution of agricultural problems4.32104.2411Providing technical guidance and other specialized services to the farmers4.3114.329.5Visiting farmers' fields for inspection advice and guidance4.694.249Arranging Extrainee sammelan4.4694.249Arranging film shows for farmers4.24134.0313.5Participating in short duration training/workshops organized by different agencies4.5264.38
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Assisting the Programme Coordinators in holding SAC meetings 4.73 1.5 4.62 3
Delivering invited lectures 468 3 45 5
100 3 100
Delivering TV/radio talks 4.65 5 4.65 2
Publishing the research/extension publications 4.73 1.5 4.68 1
Holding the special days like world food day, world environment day 4.38 10 4.38 6.5
Organizing technology weeks 4.67 4 4.29 8
Facilitating the formation of self-help groups, farmers' club etc. 4.48 8 4.21 10.5
Regarding office work and reporting
Preparation and timely submission of various periodic reports 4.68 4.5 4.56 3
Preparing and submitting special reports like survey report, FLD report as per requirement 4.68 4.5 4.56 3
Keeping up-to-date record of all sorts of information related to agriculture 4.76 3 4.56 3
Attending to visiting farmers and other visitors and dealing politely with them 4.83 1 4.65 1
Ensuring timely replies to the correspondence from superior officers, farmers and other deptts. 4.79 2 4.41 7
Keeping the record of all offices goods which are under charge and the other day to day work 4.63 6 4.5 5
Having thorough knowledge of rules 4.43 8 4.47 6
Assisting the office in the preparation of budget and other day to day work 4.25 9 3.97 9
Proper use of vehicle according to instructions/guidelines 4.54 7 4.32 8

every individual Subject Matter Specialist and to know their standing in the overall sample. Overall role perception score was worked out by summing up all the scores of role items awarded by individual Subject Matter Specialist. Based on this score they were categorized into three categories of low medium and high role perception. Data in Table 5 indicates about the overall role perception of the male and female respondents separately. It is clear from the Table that

majority of the male respondents (44.44%) were having high role perception, about 38 per cent belonged to medium role perception category and about 1/5th of the respondents were having low perception with regard to overall role of the SMSs. In this way majority of the female respondents (38.23%) were falling both in high and medium role perception category and about 1/4th of the respondents were having low perception. If we compare both we can find that male SMSs have

apparently high role perception than females. However to check overall variation between male and female SMSs, Mann-Whitney U test and chi-square test was applied. Output of the both tests revealed that there was no difference between male and female SMSs as far the overall role perception was concerned. The finding of the study is quite in line with the study conducted by Patel et al (2007) who reported that majority of the teachers in Anand Agricultural University had high to medium role perception in general and in case of research and extension work, slightly more than half had high level of perception. But the findings are different from Singh and Kumar (2012), Mistry et al (2007) and Singh (2002) who reported that most of trainers in KVKs had medium level of overall perception about their roles in the dimensions of planning, organization, motivation, training material, training, reporting, evaluation and supporting activities, majority of the women Sarpanches had medium overall role perception of leadership roles and Majority of the Gram Panchayat Members (GPMs) and Gram Sabha Members (GSMs) in all the five dimensions perceived medium role perception respectively. Anganawadi workers from Kollegal taluka had highest total role perception, planning, teaching, guidance and evaluation Mahadevaswamy and Gopalaraju (2010).

Table 5. Gender wise distribution of the SMSs according to their overall role perception score

Category &	Male		Female	
Role Perception Score	No.	%	No.	%
Low (409-451)	11	17.46	8	23.52
Medium (451-493)	24	38.09	13	38.23
High (493-535)	28	44.44	13	38.23
		1		

Z=-1.642 (NS), $\chi^2=1.27$ (NS)

CONCLUSION

KVKs are integral part of agricultural research and extension system of India. Because this was a relatively new field for women, a difference in role perception was expected than that of male SMSs. However in most of the dimensions of role, no significant difference was found in perception of male and female SMSs except front line demonstrations and management. In case of overall role perception also no significant difference was found. This indicates that female SMSs were thinking on similar lines with that of male counterpart as far their role in KVKs are concerned. However as a counTable number of SMSs in both males and females fallen below the high role perception category, some sort of orientation training programmes could be planned to get more role clarity.

REFERENCES

Anonymous (2015). Perception and Person perception. Retrieved from http:// managementconsultingcourses.com / Lesson33Perception&PersonPerception.pdf on 3/3/2015

Ibrahim, H., Muhammad, D. M., Yahaya, H and Luka, E.G (2008). Role perception and job satisfaction among extension workers in Nasarawa Agricultural Development Programme (NADP). of Nasarawa State, Nigeria Production Agriculture and Technology, 4:62-70

Kumar P (2015). Role analysis of subject matter specialists of selected krishi vigyan kendras of Northern India. Ph.D. dissertation. Punjab Agricultural University, Ludhiana, India

Mahadevaswamy K and Gopalaraju R (2010). A Study of role perception among Anganawadi Workers in different taluks of Chamarajanagar district. *Asian J Dev Matters*, 4: 156-159

Mistry J J, Patel V B and Soni M C (2007). Role perception of elected women Sarpanches under panchayati raj. *J Ext Edu* 28-29: 68-70 Patel J K, Patel M R, Patel N P (2007). Perception of teachers about the roles to be performed by them. *Guj J Ext Edu* , 28-29: 71-72 Pradhan K and Mukherjee K (2012). Revamping the technology dissemination process through Farm Science Centre. *Indian Res J Ext Edu* , 12: 48-52

Singh S (2002). Multidimensional analysis of role perception and performance of panchayat members Ph.D. dissertation. Chaudhary Charan Singh Haryana Agricultural University, Hisar, India.

Singh H C and Kumar R (2012). Role perception of the trainers of Krishi Vigyan Kendras. Ind Res J Ext Edu 12: 83-86

Venkatasubramanian V, Sajeev M V and Singha A K (2009). Concepts, approaches and methodologies for technology application and transfer - a resource book for KVKs. pp 3-4. Zonal Project Directorate, Zone – III Indian Council of Agricultural Research Umiam, Meghalaya.

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