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**ORIGINAL ARTICLE** 



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## Development Of Scale To Measure Role Performance of The Village Leader in Marathwada Region

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#### ABSTRACT

In the present study the scale develops to measure the role performance of village leader was constructed. For the construction of scale, one hundred five (105) items pertaining to role performance of village leaders were collected through review of literature and discussion with academic and administrative extension personnel and experts from department working in various universities and institutions in India. On the basis of their relevancy, finally seventy nine items were included in the final scale. Thus, proposed scale finally comprised seventy nine statements. The scale values of finally selected items were worked out by using the Normalized Rank Approach. The reliability of the scale was determined by Test-retest method. Pearson's Product Moment Coefficient of Correlation was worked out for correlating the two sets of scores for test-retest method. The value of correlation coefficient between two scores of Test-retest reliability was 0.933. Validity of scale was established by content validity method. The content validity was determined by using review of literature and opinion of 70 judges who were experts in the field of extension education and sociology. Norms of distribution of role performance of leader score obtained by using the constructed scale indicated that the distribution was, in general, normal. This was tested and confirmed by the values of central tendency. **Key words:** Role Performance, Village Leaders, Relevancy, Validity, Test-retest

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## INTRODUCTION

The village panchayats are not only the foundation of democracy in the country, but also secure effective participation of the people in the government and the planned development of the country, so that the vast number of our people living in the rural areas could be intimately associated in that vital function. It is not only expected that every citizen of the country in the rural areas should be actively associated with the administration of the country through village panchayats but he or she should also be provided with an opportunity to express himself /herself in the process to develop as an integrated citizen of an integrated state. It is the local government of the village that must touch the lives of the rural people [1, 2, 5].

Panchayat have been the backbone of the Indian village since the beginning of recorded history. Panchayat Raj in Maharashtra has its own progression path. It was among the first few states to implement the Balwantrai Mehta Committee recommendation of establishing a three tier Panchayat Raj structure. It constituted a committee on the subject in 1961, under the chairmanship of the then revenue minister Vasantrao Naik. Maharashtra already had the Mumbai Gram Panchayat Act, 1958 for governing Grampanchayats. However, on the basis of recommendations of the Vasantrao Naik Committee report (1960), the State enacted the Maharashtra Panchayat Samiti and Zilla Parishad Act, 1961 [1]. Consequently, the three-tier Panchayat Raj system was established and became functional in the State from1<sup>st</sup> May, 1962. Development of a scale to measure the role performance of village leader was attempted by using the normalized rank approach recommended by Guilford [4]. The present study was undertaken with the following specific objective:- Development of scale to measure the role performance of village leader.

#### **MATERIAL AND METHODS**

In the present study, the role performance of village leader is conceptualized as dependent variable for analyzing the role performance of village leader in Marathwada region. Development of a scale to measure the role performance of village leader was attempted by using the normalized rank approach recommended by Guilford [4]. This procedure included collection of items, allocation of weightages to items, standardization of the scale including the testing of its reliability and validity, norms of distribution of scores. For the construction of scale, one hundred five items pertaining to role performance of leaders were collected through review of literature and discussion with academic staff at various levels. From the 105 statements finally 79 statements were selected for judgment.

The research study was conducted in the Parbhani and Nanded district of the Marathwada region of Maharashtra state during the year 2016-17. Two hundred leaders were personally interviewed at their home, farm and Grampanchayat office using the scale developed to measure the role performance of village leaders. The collected data were scored and analyzed using appropriate statistical methods.

#### **RESULTS AND DISCUSSION**

# Development of scale to measure the role performance of village leader 1)Identification of the items

In order to identify the basic constituents of role performance of village leader, one hundred five (105) items pertaining to role performance of village leader were collected through review of literature and discussion with academic staff at various levels. These items/statements were sent to one hundred two (102) judges, the academic and administrative extension personnel and experts from department working in various universities and institutions in India.

The judges were requested to indicate whether each of the main items sent to them was relevant and suitable for inclusion in scale. The judges were also asked to rank the relevant main items according to their relative importance in measurement of role performance of village leader and to add items if they desired to do so. Seventy (70) judges responded out of 102. The responses received from the judges supported the relevancy of all the one hundred five items.

Those items which received more than 75 per cent relevancy were considered as relevant for inclusion in the scale. Thus on the basis of their relevancy, finally seventy nine items were included in the final scale. These seventy nine statements were categorized into eight subcategories.

#### 2)Determination of scale values

Using the Normalized Ranking Method as suggested by Guilford J.P. [3], the scale values of all the items were calculated. The detail of calculation of scale value was given in methodology.

#### 3)The reliability and validity of the developed scale

**a)Reliability of the scale**: In order to calculate reliability of the scale, Test-retest reliability test was used.

#### i)Retesting from the judges

These final statements then again retested from the judges for their reliability and rank for including in the final statement of scale. After their judgments the statements were finalized and included in the final scale.

#### ii)Reliability of the scale

Test-retest reliability of the scale was calculated on the basis of the responses of sample of 42 Grampanchayat leaders who were not included in the final sample. The scale was administered twice to these Grampanchayat leaders. The second administration was done approximately three weeks after the first one. Pearson's product moment coefficient of correlation was used for the two sets of scores in order to obtain the test-retest reliability coefficient. The reliability coefficient obtained (0.933) was quite high, indicating that the developed scale was reliable. The coefficient of correlation was also statistically highly significant at 1 per cent level.

### b)Validity of the scale

The validity of the developed scale was measured by content validity test.

#### i)Content validity

The content validity of the scale was established in two ways, firstly the various main and sub items for inclusion in the scale were based on extensive literature review from Indian and foreign studies. Secondly, the opinion of the panel of 70 judges who were expert in the field of extension education/sociology was obtained to find whether the items suggested were relevant for inclusion in the scale.

#### 4)Norms of distribution of the scores by using the constructed scale

The norms of distribution of scores are very essential for any of the constructed scales. Therefore, in the present study, the following norms of distribution of scores were worked out. Frequency distribution and

Measures of central tendency. For this purpose, the data obtained from two hundred (N = 200) village leaders were considered.

## a)Frequency distribution

The procedure recommended by Garrett [3] was used to tabulate the frequency distribution and also to work out other graphical presentation. The data regarding role performance of village leader scale was grouped into eight classes with class interval of 15 units. The frequency distribution has been given in Table 1

1	2	3	4	5
Sr. No.	Class Interval	Mid Point	Frequency	Smoothed frequency
1	15-30	22.5	20	3.33
2	30-45	37.5	30	5.80
3	45-60	52.5	37	7.46
4	60-75	67.5	45	7.33
5	75-90	82.5	28	6.06
6	90-105	97.5	18	3.86
7	105-120	112.5	12	2.66
8	120-135	127.5	10	1.46

Table 1. Frequency distribution of overall role performance of leaders in the total villages

## b) Graphical presentation of the frequency distribution

The graphical presentation of the frequency distribution helps to translate numerical facts into more concrete and understandable form. The data in Table 1 have been presented in histogram (Fig. 1) shows the histogram based on observed and smoothed frequency in column number 4 and 5 of Table 1. Further, theoretical normal curve superimposed on smoothed frequencies in the figure asymmetrically and closed resembled to normal probability curve. This indicates that the scores of two hundred leaders were normally distributed.

## c)Smoothed frequency

In smoothing, a series of 'moving' or 'running' averages were taken from which new adjusted frequencies were determined. This method is illustrated to find an adjusted or 'smoothed' frequencies, we add the frequency on the given interval and the frequencies on the two adjacent intervals (the interval just below and the interval just above) and divide the sum by 15.

#### d)Cumulative percentage curve and 'ogive'

Cumulative percentage curve is another graphical method of representing frequency distribution. To compute cumulative percentage, cumulative frequencies were required to be found out. Table 2 indicates necessary conversion of cumulative frequencies into percentage of the total number of leaders (N).

The cumulative percentage curve was later on drawn with interval limits laid on the x-axis and cumulative percentage on y-axis. Data are presented in Fig. 2. The figure drawn was quite regular, thereby indicating that scores obtained by the instrument developed followed normal distribution.

Sr. No.	<b>Class Interval</b>	Upper limit	Frequency	<b>Cumulative frequency</b>	Cumulative per cent
1	15-30	30	20	20	10.00
2	30-45	45	30	50	25.00
3	45-60	60	37	87	43.50
4	60-75	75	45	132	66.00
5	75-90	90	28	160	80.00
6	90-105	105	18	178	89.00
7	105-120	120	12	190	95.00
8	120-135	135	10	200	100.00

Table 2. Percentage cumulative frequency of overall role performance of leaders in total villages

### e) Measures of central tendency

The different values of central tendency as indicated in the chapter 'methodology' were worked out for 200 leaders were as follows.

Mean : 64.71 Median: 60.00 Mode : 39.00

These values being very close, indicating that distribution followed normal curve.

## Administration of the scale (Scoring technique)

For application of the scale, the researcher can collect information against each 79 statements in three continuum viz. 'Agree', 'Partially Agree' and 'Disagree' with weighted score of 2,1 and 0 and reverse to

negative statements. The table no. 3 indicated the scale value of each items as given by the judges with relevancy percentage.

	leader		leader						
Sr. No.	. Statements		Relevancy (%)						
Α	ADMINISTRATIVE FUNCTION								
1	Demanding the required funds for developmental plan	9.49	90.00						
2	Prepare plans for increasing productivity or income of agricultural and non-agricultural sectors	7.01	90.00						
3	Implementation and development of different schemes and programmes given by the government authority	11.12	88.57						
4	Regular conduct of gram-sabha and Grampanchayat meetings and keep the records for various department	12.43	87.57						
5	Promotion and development of educational, health, agriculture, and communication facilities in the village	8.98	88.57						
6	Prepare important information and documents of village panchayat	10.08	87.14						
7	Utilization of funds by the panchayat towards the approved plan, programmes and projects	9.98	85.71						
8	Reclamation of waste or fallow land and bringing waste or fallow land under cultivation	8.20	84.28						
9	Construction and development of water supply scheme for village	7.45	84.28						
10	Preparation and implementation of village development plan and conducting survey	11.98	82.85						
11	Produce authentic documents regarding Birth, Death, Marriage and property details of the village people	11.03	81.42						
12	Helps in removing illegal encroachment on public property/ panchayat land	9.47	81.42						
13	Collection and levy of different taxes, charges, fees, and other non-tax resources	9.15	81.42						
14	Assistance in the implementation of land reform scheme	7.75	80.00						
15	Establishment of Nyay panchayat for solving the disputes of village peoples	7.50	78.57						
В	AGRICULTURAL DEVELOPMENT FUNCTION								
1	Promotion and cultivation of agricultural and horticultural crops in the village	10.12	90.00						
2	Implementation of land improvement and soil conservation programme in the village	12.44	90.00						
3	Promotion of watershed development programme in the village.	11.49	90.00						
4	Promotion of dairy, poultry, fishery, piggery, sheep and goat farming in the village	11.97	88.57						
5	Promotion and encouragement of cottage, khadi as well as food processing industries in co-operative basis.	11.34	87.14						
6	Introduction and promotion of co-operative farming and different enterprises	8.65	85.71						
7	Provide veterinary health care to all livestock in the village.	9.98	84.28						
8	Focuses on crop protection and crop experiment	7.59	84.28						
9	Securing minimum standards of cultivation in the village with a view to increase agricultural production	7.39	82.85						
10	Providing information about vermi-compost and bio-gas plant	6.56	82.85						
11	Taking efforts for agricultural development programmes	12.24	81.42						
12	Arrangement of grow more food campaign and improved breeding programmes for cattle	8.80	81.42						
13	Promotion and development of minor forest produce	7.21	81.42						
14	Construction, repair, and maintenance of minor irrigation project	9.12	80.00						
15	Assisting in land consolidation of village	6.39	80.00						
С	PUBLIC WORK FUNCTION								
1	Lighting of streets and various public places in the village	5.96	91.42						
2	Establishment and maintenance of libraries, reading rooms as well as	5.63	90.00						
	play grounds for children/ youth								

## Table 3: Final statements/ items included in the scale to measure the role performance of village

4		4.62	00 57
4	Promotion and implementation of rural housing programme and rural electrification programme in the village	4.62	88.57
5	Construction, maintenance, repair, and protection of public streets/ roads	6.60	87.14
6	Construction and maintenance of dharmashala, rest houses, cattle sheds and cart sheds	4.62	87.14
7	Establishment of different credit society and co-operative society	3.86	87.14
8	Construction and repair of gutters, drains, and small irrigation bandharas	4.57	87.14
D	HEALTH CARE FUNCTION		
1	Supply of clean water for domestic use	7.81	91.42
2	Promote child health and nutrition programmes	7.54	88.57
3	Promote vaccination programmes for human and animals	7.32	88.57
4	Disinfecting the sources of supply and storage drinking water	6.40	88.57
5	Establishment and maintenance of rural dispensaries, health central, maternity, and child welfare central	8.86	87.14
6	Cleaning public wells and drainage system of the village	6.22	87.14
7	Maintaining sanitation and public health	8.01	85.71
8	Sanitation of public latrines and urinaries	4.96	85.71
9	Arrangement of blood donation camp	8.83	85.71
10	Help in organizing free diagnosis and treatment camp	4.75	82.85
11	Taking curative and preventive measures against any epidemic problems	5.61	81.42
E	EDUCATIONAL AND CULTURAL FUNCTION	5.01	01.12
1	Promote primary, secondary, technical, vocational, adult and non-formal education to the village peoples	6.42	88.57
2	Conserve art and culture of the village	4.90	87.14
3	Promotion of social and cultural activities	4.36	87.14
4	Establishment and maintenance of rural clubs for sports	4.03	85.71
5	Panchayat shall supervise primary school situated within the area of its jurisdiction	4.16	84.28
6	Promotion for establish balwadi/ anganwadi in the village	4.34	82.85
F	WELFARE FUNCTION	110 1	02.00
1	Promote the social and moral welfare of the village	5.15	90.00
2	Promotion and implementation of poverty alleviation programme	7.12	88.57
3	Implementation of the specific programmes for the scheduled caste,	6.03	87.14
	scheduled tribes and other weaker sections of the society		
4	Protect all needy families in the village by providing MGNAREGA scheme	4.85	87.14
5	Preparation and implementation of schemes for social justice	5.73	85.71
6	Promote welfare of socially and educationally backward classes	7.57	84.28
7	Remove the untouchability and improve the status of the backward section	5.03	84.28
8	Preparation of plan for economic development of the area of the Grampanchayat	6.84	82.85
9	Promotion of public awareness with regards to the distribution of essential commodities	4.08	81.42
G	DEFENCE AND VIGILANCE FUNCTION	Т	
1	Regulate and control the dangerous business in the village	3.68	88.57
2	Maintain peace and order in the village	4.24	87.14
		3.13	85.71
3	Protect the village property from fire	5.15	05./1
3 4	Protect the village property from fire Provide relief activities during natural calamities such as floods, famine and drought	3.60	84.28
	Provide relief activities during natural calamities such as floods, famine and drought Maintain gram-rakshak force for general protection of village against		
4	Provide relief activities during natural calamities such as floods, famine and drought	3.60	84.28
4 5	Provide relief activities during natural calamities such as floods, famine and drought Maintain gram-rakshak force for general protection of village against thieves, dacoits etc. and crops from wild animals	3.60	84.28
4 5 H	Provide relief activities during natural calamities such as floods, famine and droughtMaintain gram-rakshak force for general protection of village against thieves, dacoits etc. and crops from wild animalsDISASTER MANAGEMENT FUNCTIONPRE DISASTERActivating disaster management plans with the participation of	3.60	84.28
4 5 H I	Provide relief activities during natural calamities such as floods, famine and drought         Maintain gram-rakshak force for general protection of village against thieves, dacoits etc. and crops from wild animals         DISASTER MANAGEMENT FUNCTION         PRE DISASTER         Activating disaster management plans with the participation of community         Organization of awareness campaign and to promote community	3.60 3.27	84.28
4 5 H I 1	Provide relief activities during natural calamities such as floods, famine and droughtMaintain gram-rakshak force for general protection of village against thieves, dacoits etc. and crops from wild animalsDISASTER MANAGEMENT FUNCTIONPRE DISASTERActivating disaster management plans with the participation of community	3.60 3.27 2.61	84.28 80.00 88.57

	through community involvement		
II	DURING DISASTER		
1	Arrangement of emergency communication through available resources	3.54	87.14
2	Safe disposal of carcass and arranging safe drinking water and maintain sanitation	2.44	87.14
4	Supplementary rescue and relief efforts in coordinating different agencies	2.83	85.71
4	Evacuation to temporary shelter and running relief camp	2.79	84.28
III	POST DISASTER		
1	Formulating rehabilitation and reconstruction plane of houses and other local infrastructures	1.88	84.28
2	Supervise and monitor long term reconstruction and mitigation projects	2.09	75.80

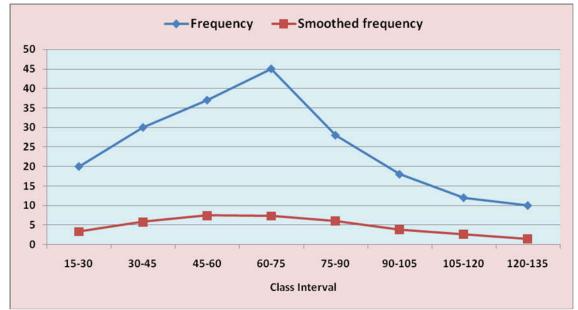


Fig.1. Histogram of observed and smoothed frequencies with normal curve superimoposed on smoothed frequency

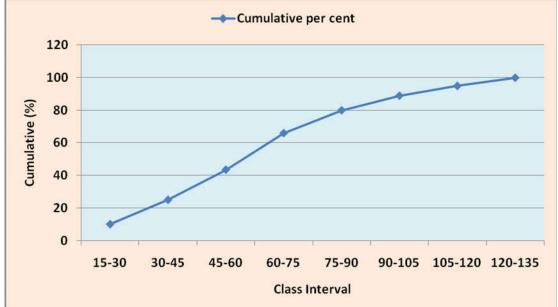


Fig. 2. Cumulative percentage curve (ogive) of overall role performance of 200 village leaders

## CONCLUSIONS

The role performance scale developed is found to be reliable and valid; hence it can be used to measure the role performance village leader. From the various methods available for constructing the scale, to

measure the role performance of village leader was attempted by using the normalized rank approach. The advantage of this method was that it can be used with almost any number of variables and does not require a large number of judges for ranking the variables. Hence, this method was used in developing the present instrument.

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