

NOTE

**ORGANIZATION MANAGEMENT SYSTEM
AFFECTING EXTENSION PROFESSIONALS'
MOTIVATION**

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ABSTRACT

Management systems of organizations play a significant role in employees' level of motivation. The organizational climate resulting from a management system that is conducive to actualizing human potentials, would greatly enhance motivation level. Three decades ago Likert proposed a participative management organization which is applicable today if we desire to bring the management and leadership of our professional organizations up to date with that of an information-age organization. The purpose of this study was to determine the management system being practiced in Qom Jihad-e-Sazandegi Organization (QJSO) as measured by Likert's Profile of Organizational Characteristics and examine its relationship to the personnels' motivation level. The result indicated that the QJSO is a benevolent authoritative (a system-2) organization where most of the decision making and goal setting are done at the top of the organization. The finding is consistent with Likert assertion that most organizations are in system-2 and would desire a system-4 (participative management). The

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staffs' level of motivation has been found to have a very strong and positive relationship with their perception of management system ($r=0.72$). This implied that as the respondents' perception of management system improved along a continuum from a system-1 toward a system-4, their level of motivation increased substantially.

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تأثیر نظام مدیریت سازمانی بر انگیزه کارکنان ترویج

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چکیده

نظام های مدیریتی نقش مهمی را در میزان انگیزه کارکنان دارند. فضای سازمانی ناشی از نظام مدیریتی که در آن پتانسیل های انسانی به شکوفایی برسد، تأثیر مثبتی بر میزان انگیزه کارکنان دارد. سه دهه گذشته آنچه را که رنسانس لیبرت به عنوان نظام مدیریتی چهارگانه پیشنهاد کرده، امروزه در سازمان ها قابل اجرا است و می تواند رهبری و مدیریت سازمان ها را با ارزش های

جوامع مترقی امروزه هماهنگ کند. هدف این تحقیق، شناسایی نوع نظام مدیریتی سازمان جهاد سازندگی استان قم (از طریق ابزار اندازه گیری ساختار سازمانی لیکرت) و سنجش ارتباط آن با میزان انگیزه کارکنان بود. نتایج این مطالعه نشان داده که نظام مدیریتی سازمان از نوع مدیریت استبدادی خیر خواهانه (سیستم ۲ در نظام چهار گانه لیکرت) است. در این نوع نظام های مدیریتی، بیشتر تصمیم گیری ها و تعیین اهداف در سطوح بالای سازمان گرفته و تعیین می شود. این یافته ها، نظریات لیکرت را که بیشتر سازمان ها در سیستم ۲ قرار دارند و تمایل کارکنان را به طرف تغییر به سیستم ۴ دارند، تایید می کند. در این پژوهش، بین میزان انگیزه کارکنان جهاد سازندگی استان قم و نوع نظام مدیریتی سازمان ارتباط مثبت، قوی و معنی داری ($r=0.72$) مشاهده شد. این یافته با نظریه لیکرت مبنی بر این که هر چقدر نگرش کارکنان در رابطه با نوع نظام مدیریتی سازمان از سیستم ۱ بطرف سیستم ۴ بهبود یابد، میزان انگیزه آنان به مقدار قابل توجهی افزایش می یابد، نیز همسوئی دارد. آزمون رگرسیون چند متغیره نشان داده است که ۵۲٪ از نوسانات در میزان انگیزه کارکنان را نوع نظام مدیریتی سازمان جهاد سازندگی تبیین می کند.

INTRODUCTION

Some typical shortcomings of conventional extension services common to many developing countries are high bureaucracy, ineffective organizational structure, and personnel's lack of motivation (16). These shortcomings are some of the main challenges facing the management of Iran's extension organization. Nowadays, extension professionals' expectations have changed to the extent that they place a higher value on intrinsic rewards such as achievement, personal growth and development over traditional rewards such as promotion (14, 21). Effective utilization of

proper management techniques and organizational climate conducive to actualizing human potential are some of the main factors affecting extension personnels' motivation.

Researchers have pointed out that participatory management tends to raise morale, increase individual's incentive, and improve the efficiency and productivity of the organization (12, 9, 13). Three decades ago Likert (10) proposed a participative management organization which is applicable by extension organizations of today, if we desire to bring the management and leadership of our professional organizations up-to-date with that of an information-age organization. Likert conducted extensive research on examining the effect of management systems on employee attitudes and behavior, which resulted in developing four management systems. The management systems ranged on a continuum from a most despotic and authoritative management (system-1) to a participative management structure (system-4). Each system characterizes an organizational climate based on several key dimensions of effectiveness, including leadership, motivation, communications, interaction/influence, decision making, goal setting, control and performance goals.

Iran's Jihad-e-Sazandegi Organization (JSO), in every provincial capital, represents the Ministry of Jihad-e-Sazandegi. JSO, together with their branch offices in every city and rural area, is responsible for extension activities throughout the country. The specific subject matters that JSO is responsible for includes natural resource management, forestry, fishery, animal husbandry, rural development, and social and cultural welfare. The organizational structure of JSO is characterized by a traditional and an industrial-age structure which is derived from 19th century practices. In an industrial-age organization, managers are seen as the boss and everyone else as subordinates (3). Extension professionals agree that they no longer live in an industrial-age society, rather they are in a transition from an information-age to a communication-age. Moving an extension organization into the future requires a leadership style with attributes compatible with an information-age organization (1, 6, 8, 18, 20).

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If the Iranian extension organization is indeed an industrial-age organization, it will tend to deal with employee motivation, reward, and promotion in a way which is incompatible with that of an information-age organization. In order to initiate a change and improve an organization management system, it is essential to assess and identify the existing management system of the organization. Through the use of the Profile of Organizational Characteristics (POC), Likert (10) asserted that it is possible to measure the management system of an entire organization.

The primary purpose of this study was to measure the perceptions of the QJSO professional staff toward the organization's management systems (existing and desired). Another purpose was to measure the professional staff members' self-perceived level of motivation and determine its relationship to the management system. The specific objectives of the study were to:

1. Determine the existing and desired management system of the QJSO as perceived by its staff.
2. Determine the extension professional staff members' self-perceived level of motivation.
3. Determine the relationship between the QJSO management system and the professional staff members' level of motivation and determine the correlation level of independent variables on motivation and management.
4. Determine how much of the variance in motivation could be explained by the staff's perception of management system.

METHODS AND PROCEDURES

The design of this study was descriptive-correlational. The QJSO professional staff members' level of motivation was correlated to their scores on management systems.

Population and Sampling

An initial study indicated that the organizational climate and management approaches within JSOs throughout the country are fairly similar, therefore, an accessible organization in the province of Qom was selected for the purposes of this study. All the QJSO professional staff with education level of high school diploma or higher served as the population for this study. The most recent list (as at the spring of 1999) of the QJSO professional staff was used as a guide to identify the member of the population. A total of 148 professionals made up the population (N=148) for this study. A sampling size of 98 was computed for acquiring 95% confidence. The samples of the study were identified from the list through a systematic sampling method.

Instrumentation

The Profile of Organizational Characteristic (POC) which is based on Likert's system-4 theory (15) was used to gather data on management systems and motivation. The POC allowed the employees to briefly describe the management system as they perceived being practiced in the QJSO, and gave them an opportunity to indicate which management system they desired in the future. The reliability and validity of the POC instrument were established by Likert based on more than 250 studies in business and industry involving more than 200,000 employees and 20,000 managers (10). The reliability is defined as the extent to which an instrument is free from random errors of measurement (7), and is expressed as a coefficient ranging from 0 to 1 (0 being the most unreliable and 1 being completely reliable). For a non-experimental study, according to Pedhazur (19), a reliability

coefficient between 0.50 and 0.80 is acceptable.

A pilot study was conducted to establish reliability of the instrument for the population of interest. A Cronbach's alpha (a reliability coefficient) of 0.84 was computed for the instrument. A reliability coefficient of 0.92 on this instrument was reported earlier by Sadighi (21). In other studies of management styles in Georgia and Ohio (11), the POC instrument were utilized and reliability coefficients of 0.95 and 0.83 were reported respectively for these studies. A separate part of the questionnaire that dealt specifically with motivation was used to measure the professional staff level of motivation. A panel of experts was used to establish a content validity of the instrument for the local use. A reliability coefficient of 0.89 was obtained for the motivation part of the instrument. The possible response to each motivation question ranged from 1 to 20. Four categories consistent with system-4 were used to characterize the QJSO professional staff's level of motivation. The responses on the management parts were converted to Likert's management system ratings. The following formula was used to convert the management scores into Likert's type management systems:

$$\text{Sys} = (X) 4/20 + 0.5$$

Sys = Management system

X = The overall mean computed for each respondent

Example: Given a mean of 12, Sys= (12) 4/20 + 0.5 = 2.9

To determine each system's rating, the following assumptions were used:

system-1 covers the range from 0.05 to 1.50, system-2 covers 1.51 to 2.50, system-3 covers 2.51 to 3.50, and system-4 covers 3.51 to 4.50 (10). In the above example: Sys=2.9 which is equal to system-3 = Consultative Management System.

Data Analysis

Data gathered were analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows (17). Eighty-two usable questionnaires were obtained, giving a response rate of 83.6%. Questionnaires were distributed to the participants with a uniform set of instruction and collected in person (by the researchers and associates). Descriptive statistics were used to describe and summarize the personnels' characteristics. Pearson Product-Moment Correlation Coefficients were computed to describe the strength and nature of relationship of motivation to management systems. Multivariate linear regressions were used to determine the amount of variance in the dependent variables that could be explained by the variance in participants' individual characteristics. The dependent variables in this study included motivation score and the management systems (existing and desired).

RESULTS AND DISCUSSION

The age of the participants ranged between 22 and 52 years, the mean age being 32 years with a standard deviation of 6.27. All the participants were male, 75% were married and 25% were single. The mean years of service at QJSO by the participants was 8.27 with standard deviation of 5.8. The mean years of service at current position by the participants was 4.2 with a standard deviation of 3.62. The average education level of participants was a B.S. level (Mean=16.1 years of study with a standard deviation of 1.33). The findings related to each objective of the study are presented as follow:

Objective One

The existing management system as perceived by the QJSO professional staff was computed to be a system-2, which indicated the management system, of the QJSO is a benevolent authoritarian (BA) organization. In a BA management system the leadership is more autocratic and motivation is based on extrinsic rewards. The results of the study showed (Table 1) that

the desired management system as indicated by the QJSO professional staff was a system-4, which is a participative management (PM) organization. This supports the finding reported by Sadighi *et al.* (22) and is consistent with Likert (10) assertion that most organizations are in system-2 and that most professionals would desire a system-4 management system.

Table 1. The perceived existing and desired management systems of QJSO.

Variable	Sample	Mean score	Stand. dev.	Converted sys [†]	Management systems
Existing management	82	8.89	3.09	2.47	2
Desired management	82	15.27	2.78	3.55	4

†. Sys = (Mean Management Score)4/20+0.5

A change in an organizational climate from a system-2 to a system-4 is time-consuming and may take three to five years (10). Institutional changes in Iran have been occurring slowly. On a similar context, Binswanger and Ruttan (2) reviewed some historical precedences and pointed to the structural nature of government organizations as the main reason for this slow progress.

Objective Two

The QJSO professional staff members' level of motivation ranged from 2.28 to 16 (the possible obtainable score ranged from 1 to 20). The mean motivation score of the participants was 9.70 with a standard deviation of 3.01. More than 53 % of the participants scored above the mean, which among them, 48.8% of respondents' motivation level were consistent with an organizational climate of system-3. As the mean motivation level of

respondents was characterized to be consistent with a system-2 organizational environment, it is reasonable to conclude that major emphasis within the organization is based on extrinsic rather than intrinsic rewards. This also indicated the reliability of the instrument that measured the respondents' level of motivation to be highly consistent with the organizational climate that they perceived to be working in.

Objective Three

The correlation coefficients (Pearson Product Moment) were used to measure the relationship between the level of motivation and management system. The results yielded a correlation coefficient of 0.72, which implied a very strong and positive association (4) between the staffs' level of motivation and their perception of management system of the QJSO. Data presented in Table 2 show the magnitude and direction of association between the independent and dependent variables.

Objective Four

The result of linear regression indicated that the 52% of variance in participants' motivation level could be explained by their perception of management system ($R^2 = 0.52$). The regression of motivation on management score resulted in a significant t for the variable and the constant, therefore the following equation was drawn to predict the motivation level of the QJSO professional staff.

$$Y = 0.704(X) + 2.734$$

Y = Motivation level

X = Management score

Since there is a very strong positive relationship between the staff's level of motivation and their perception of management system, it is implied that as the respondents' perception of management system improved along a continuum from a system-1 toward a system-4, their level of motivation

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increased substantially. Therefore, active participation on basic issues concerning the organization and the individuals' job could enhance motivation (12).

Table 2. Correlation of independent variables on motivation and management system.

Variable	Management score		Motivation level	
	r	Probability	r	Probability
Management score	1.000		.723	0.000 [†]
Motivation level	0.723	0.000 [†]	1.000	
Education	-0.005	0.485	-0.045	0.374
Marital status	-0.258	0.031 ^{††}	-0.197	0.079
Age	-0.098	0.242	0.007	0.480
Salary	0.055	0.347	0.072	0.304
Years at current position	-0.114	0.209	-0.008	0.478
Years served at QJSO	-0.020	0.445	0.008	0.479

† P<0.001 †† P<0.05.

The result of multivariate linear regression analysis between motivation level and the independent variables (with interval data) showed no statistical significance, therefore no relation could be drawn. In a study on similar population, negligible association between motivation level and professional staffs' individual characteristics was reported (5, 22). In contrast to organizational climate (management system) that explained 52% of the variance in motivation level, individual characteristics played no significant role in staffs' motivation level. This implied that there are other factors that may contribute to variations in motivation level.

CONCLUSIONS

Based on the findings of this study, it can be concluded:

1. The QJSO epitomizes a typical bureaucratic organization where rewards and motivation are dealt with in a traditional manner. The QJSO is characterized as a benevolent authoritative (a system-2 by Likert classification of management systems) organization where most of the decision making and goal setting are done at the top of the organization.
2. The QJSO organization has a great potential to become a participative management system because the majority of the professional staff favor a management system based on a participatory style.
3. There is a very strong association between the participants' motivation level and their perception of management system. The professional staff members' level of motivation could be greatly enhanced by improving the existing management system of the QJSO.
4. The respondents' individual characteristics played no significant role in affecting the motivation level. This implied that there are other factors that may influence motivation.

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