

THE IMPORTANCE OF CULTURAL COMPETENCY FOR AGRICULTURAL EXTENSION WORKER IN MALAYSIA

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Abstract

This study determined the relationships between cultural competency and performance among extension workers at Department of Agriculture, Malaysia. The sample consisted of 210 extension workers from Department of Agriculture in four states of Malaysia. The study employed stratified random sampling technique. The data were analyzed using descriptive statistics and Pearson correlation analysis. The findings support positive relationship between cultural competency and performance. Finding would help extension managers to focus on development of culturally competent extension workers at Department of Agriculture. Cultural competency could be incorporated into in-service training as well.

Key Words: Cultural Competency, performance, Extension worker

Introduction

In developing countries such as Malaysia, rural people have depended on extension worker for technical advice and information. The success of extension programs will be determined to a large degree by the ability of the extension worker to be qualified and competent since the whole extension process is dependent on them to transfer new ideas and technical advice to the rural people. Productivity of the extension organization also highly depends upon the function of extension workers. In fact competent extension workers ensure the success of the extension services and extension organizations as well.

Although majority of extension worker transfer technical advice to the rural people however extension is known as a human system. Extension therefore is a human process as well in which technical information are integrated and used to help rural people achieve their potentials (Boone, 1990).

Since the most important interface in technology transfer is human; therefore the key point in technology transfer is how to transform the rural people into a new idea (Jon Chang Hong, 1994). Furthermore human attitudes and behaviours are influenced by their society's culture, it therefore important for extension workers to have knowledge on the culture of the rural people before embarking transferring of technologies to them. In fact in all societies there are accepted ways of doing things and these ways are related to the culture of the society. Okley and Garforth (1985) stated an extension worker will be more effective if understands the cultural background of the rural people with whom he works. He will be better able to offer advice and useful information that fits in with the culture of the society, and can use the culture of the society to the benefit of his work.

The concept of culture and cultural competency:

Culture has many definitions, it is often used to represent ways of life included rules, values, expected behaviors, shared ideas and beliefs about what are morally right or wrong, or what is culturally acceptable (Brennana, 2005).

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According to Okley & Garforth (1985) the culture of a society is the accepted way of doing things in that particular society. It is the way in which people live, their customs, traditions and even methods of cultivation. The culture of rural society is learned by each member of the society and it is not only collection of customs and habits accidentally but it has been developed by the rural people to help them in their life.

According to Olsen, Bhattacharya and Scharf (2006) culture encompasses all the learned beliefs, traditions, language, values, customs, rituals, manners of interacting, forms of communication, expectations for behaviors, roles and relationships commonly shared among members of a particular group, and often transmitted from generation to generation. They become the norm and feel so natural to people within that culture.

On the other hand competency is defined as knowledge, skills, or abilities required of the job (Cooper & Graham, 2001). Therefore cultural competency is knowledge and skill on the culture of client system. Extension worker must be culturally competent and it means to understand the cultural values of the rural people system and use them in planning and implementing extension program and services (Fong and Furuto, 2001).

Similarly Olsen, et al. (2006) defined cultural competency as the ability to work effectively across cultures. It is an approach to learning, communicating and working with people different from themselves. Culture can refer to an individual's race, class, gender, sexual orientation, religion, immigration status and age, among other things.

Cultural Competency and Extension Performance

Cultural competency has become a necessity for service providers, professionals and agencies (Laurie Olsen, et al. 2006). Since extension is a non-formal educational function that applies to any institution/agency that disseminates information with the intention of upgrading knowledge, attitudes, skills and aspirations of the people (Rivera & Qamar, 2003), cultural competency indeed appear to be necessity for extension agency and extension worker as well.

Oakley and Garforth (1985) reported some areas of competency as important for the extension workers to perform their job effectively such as rural life competency or cultural competency; this includes local traditions, practices, culture and values of the clients. The more extension workers learn about the culture of rural people the more he will be accepted by them and the more he will also know type of advice will be useful for them.

Similarly Warrix and Bocanegra (1998) stated that extension worker must understand the culture of the rural people in order to develop effective training programs. Extension worker need to view culture as an enabler before developing extension activities. Extension worker' failure to understand rural people' culture will result in under- used extension programs.

Malaysia is a multi-cultural country, made up of mostly Malay (more than 50%) followed by Chinese (26%) and Indians (8%) and other ethnic groups. These groups vary in culture, language, socioeconomic status, race and religion. Extension workers are dealing with these ethnics to transfer advice and new technology to them. There is great urgency for extension service and extension organizations to reach these groups and be able to serve them effectively. Within this country more than three languages are spoken, one factor that affects successful transfer of technology is the involvement of a committed bilingual extension worker who can provide ongoing communication to the different clients

With the help of this competency extension worker will be able to serve all rural people and bridge across cultural differences, and ultimately improve the extension outcomes and performances. As a result one factor that affects successful transfer of technology is the involvement of culturally competent extension worker to understand the cultural values of the rural people and use them in planning and implementing extension program and moreover provide advisory services to the rural people that fit in with the culture of society. Extension workers should respect and work through the existing culture. It is important that the extension worker be aware of the existence of local norms and to take them into account in the process of

technology transfer. Hence this competency can improve extension performance. This study is an attempt to demonstrate importance of cultural competency for extension worker in order to perform their job well. However no previous studies could be found that tested a link between cultural competencies and extension workers' performance in the context of agricultural extension.

Objective of the Study

The objectives of the study are to determine:

1. The level of cultural competency of extension workers.
2. The relationships between cultural competency and performance.

Research Design

According to Hopkins (2000) the aim of quantitative research is to determine the relationship between an independent variable and a dependent variable in a population. Quantitative research designs are either descriptive or experimental. A descriptive study establishes only associations between variables. The present study is a descriptive correlation to allow a quantitative description of the relevant features of the data collected as well as the relationship between the variables.

Target Population and Sample Size

The target population of this study consists of all extension workers in Department of Agriculture (DOA) who deals directly with the rural peoples. There are a total of 651 extension workers within West Malaysia. The population for this study is (N=651). The required sample size for the study was specified as 210 extension workers. This is a sufficient sample for a good representative of the population of approximately 651.

Sampling Method and Procedure

West Malaysia consists of four regions Northern region, Central region, Eastern region and Southern region (Mohamed Aslan & Asan Ali Golam Hassan, 2003). In order to make sure all four regions are included in this study, a sampling technique that is considered to be the most appropriate is stratified random sample. This study employs a geographical stratified sampling method. First one state was randomly selected from each region. The states were selected are Perak in the northern region (131 extensionists), Negeri Sembilan in the central region (41 extensionists), Kelantan in the eastern region (67 extensionists) and Johor in the southern region (81 extensionists). The total number of extensionists in these four states (stratum) is 320.

Then, samples were chosen with a simple technique called proportional sample allocation. The size of the sample in each state (stratum) is taken in proportion to the size of the stratum. The samples were as follows:

Number of sample in Perak (northern region) = $(131 / 320) 210 = 86$

Number of sample in Negeri Sembilan (central region) = $(41 / 320) 210 = 27$

Number of sample in Kelantan (eastern region) = $(67 / 320) 210 = 44$

Number of sample in Johor (southern region) = $(81 / 320) 210 = 53$

From each state, respondents were picked at random from the complete list of respondents. The list of extension workers in each state was obtained from department of agriculture. A total of 210 extension workers were randomly selected.

Instrument and Measurement

This study utilizes a questionnaire as the instrument to collect data from the respondents.

A questionnaire was created, which consisted of the two sections. First part of the questionnaire is designed to collect data and measure the cultural competency of extension workers. This part of questionnaire was developed by the researcher through review of literature. The second part of questionnaire is to measure performance of extension workers.

Measurement of the Variables

Independence Variable

Cultural competency: This variable was measured by the extent of extension worker 'ability to understand and work within cultures (local norms, values and traditions) of the rural people in process of technology transfer. This variable was measured by six items.

Dependent Variable

Extension workers' performance:

Performance of extension workers is defined as activities performed in a given position as carries out the responsibilities and duties of the position. Particularly those activities that are concerned with the fulfillment of the expectations associated with that position. In this study, extension workers' performance, the dependent variable was measured using the different function of their job. Respondents were asked to assess their performance on eleven categories of dimensions namely:

Quantity of Work, Quality of work, Deliver of time /Timeliness, and Effectiveness of work, Knowledge and skill in work, Implementation of Policy and direction, Effectiveness of communication, Ability to manage, Discipline, Pro-active and innovative, and Relationship and co-operation.

The instrument contained eleven dimensions of performance and totally 47 items that extension workers are supposed to perform in their current position.

The instrument was obtained the self-reported levels of performance of the extension workers on a 10 point scale that ranged from 1 for "strongly disagree" to 10 for "strongly agree." Higher scores on these measurements represented higher levels of performance.

However Farh and Werbel (1986) found that in performance assessment, self rating was highly equal with supervisory rating. Self ratings were found to be as stringent as supervisory rating for all performance dimensions and in the areas of performance assessment.

Response Scale

In this study, a 10 -point likert-like scale was used to measure the constructs. According to Pallant (2007) the 10-piont scale gives respondents a wider range of possible scores and increases the statistical analysis available to respondents by arranging a number from 1 to 10.

Validity and Reliability of the Instrument

As a first step toward validating the instrument, the items were reviewed by panel of experts comprising various faculty members. They were consulted on face validity and content validity on each part of the questionnaire. Changes were made to the structure and length of the questions. A reliability analysis by using Cronbach's alpha was conducted to serve the purposes. Following this, the instrument was piloted with

20 extension workers in Selangor state. A reliability analysis using Cronbach's Alpha was also performed for each scale. The result for Reliability Statistics are summarized in Table 1

Table 1: Reliability Statistics (Cronbach's Alpha) for each variable

	Number of items	Cronbach's α Pilot study (n=20)	Cronbach's α Actual study (n=210)
Cultural competency (X)	6	.941	.915
Performance(Y)	46	.960	.973

Data collection Procedures

The researcher employed a drop and pick method to ascertain a higher response rate compare to mailed questionnaire. In order to collect data, first the list names of extension workers in four states were obtained from the DOA. From the list, the required numbers of extension workers from each state was selected randomly. Those identified names with the attachment of approval letter of the study from DOA and research schedule were faxed to the state DOA in all four states. To administer the questionnaire the researcher traveled to those states in due time. The final version of the questionnaire was distributed to the respondents. Generally extension workers responded on time and researcher collected questionnaires personally from each state.

Finding and Discussions

Level of cultural competency of extension workers

The first objective of this study was to determine the level of cultural competency of extension workers. As depicted in table 2, the minimum rating for this competency was 4.83 and a maximum of 10.00 and that gave a range of 5.17. The median value was 8.00 with a standard deviation of 1.24. The mean rating was 7.89. In accordance the rating of (4 and below 4) is low, (4.1-6.9) is moderate, (7- 8.9) is high and (9 and above 9) is very high as the indication of the cultural competency, the extension workers have rated very high in justifying this skill. Extension workers who felt that their level of this competency is very high (53.3%), high (41.0%) and moderate (5.7%).

Table 2: Level of cultural competency (n=210)

Descriptive Statistics	cultural competency (x)
Mean	7.89
Median	8.00
Standard Deviation	1.24
Minimum	4.83
Maximum	10.00
Range	5.17
Interquartile Range (IQR)	1.83
Skewness	-.22

Relationship between cultural competency and performance

The second objective of this study was to determine relationships between cultural competency and performance. The Pearson correlation coefficient was employed to achieve this objective. In relation to this, the following hypotheses were put forth:

Ha: There is positive linear relationship between cultural competency and extension workers' performance.

Results shows that Performance of extension workers is positively related to Cultural competency ($r = .611$, $p = .001$). According to the table 3, the large correlation between cultural competency of extension workers and their performance, suggesting strong relationship between these two variables. Since the relationship between independent variable and dependent variables is significant and positive. As a result, the hypothesis is supported. Hence when the cultural competency increases, performance also increases.

Table 3: Range for interpreting the correlation coefficients

r	Strength of Relationship
-0.10 to -0.29 and +0.10 to +0.29	Small correlation
-0.30 to -0.49 and +0.30 to +0.49	Medium correlation
-0.50 to -1.00 and +0.50 to +1.00	Large correlation

Source: Cohen (1997)

Performance positively related to competencies. This is consistent with past findings that suggested there is a positive relationship between extension workers' competency and performance (Heffernan & Flood, 2000; Dhanakumars, 2001 & Linders, 2001; Armstrong, 2006).

Similarly Warrix and Bocanegra (1998) emphasized that extension workers must understand the cultural and value of the clients in order to develop effective training programs. Extension workers need to view and understand culture as an enabler rather than a resistant force.

Conclusion, implementations and recommendations:

-Malaysian extension workers are culturally competent.

-According to correlation analysis cultural competency studied in this research was found to have correlated with extension workers' performance. Hence this finding would be concluded as follows:

Extension workers' performance is expected to increase if they have cultural competency.

Practical implications:

Results show that cultural competency is correlated with performance. Such information provides for valid and reliable criteria for selection, training, and development of extension workers (Buford & Lindner, 2002). Employee development networks can use this result as a basis to provide cultural competencies to develop training programs for extension workers in order to increase their performance level.

The result of this study challenge extension workers to consider developing their human skills along with technical skills on process of technology transfer.

It is recommended that the Department of Agriculture undertake a training program to develop and equip its extension workers with cultural competency for higher performance. Cultural competency should be incorporated into in-service training.

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Cultural competency of extension workers.

Strongly disagree ← Strongly agree →

		1	2	3	4	5	6	7	8	9	10
1	I demonstrate respect to rural people's diverse cultures, beliefs and religion in process of technology transfer										
2	I ensure that clients' values and traditions are not disrupted in the process of technology transfer and adoption										
3	I learn about local norms, values and traditions of rural people first before embarking on the process of technology transfer										
4	I use the existing structure of the society and their culture to plan and implement extension educational programs.										
5	I believe the more extension workers learn and respect the culture of rural people; the more he/she will be accepted by them in extension process.										
6	I consider composition of the community ,prejudices and taboos before embarking on process of technology transfer										

Part B: performance of extensionworkers

Part: 1
Work Output

Quantity of Work

strongly disagrees ← strongly agree →

		1	2	3	4	5	6	7	8	9	10
1	I have planned extension program according to the requirements of new technology										
2	I have always conducted educational program to develop rural peoples' capacity and potential.										
3	I have conducted educational program satisfactory										
4	I always fulfill without fail in getting the required number of rural people										

Quality of work

1	I have conducted educational activities that meets requirement of accuracy.	1	2	3	4	5	6	7	8	9	10
2	I have conducted educational activities systematically.	1	2	3	4	5	6	7	8	9	10
3	I have made new efforts in educational activities to improve the rural peoples' quality of life.	1	2	3	4	5	6	7	8	9	10
4	I take a personal initiative to meet rural peoples' requirements.	1	2	3	4	5	6	7	8	9	10
5	I will make sure educational activities I have conducted always meet rural peoples' expectations	1	2	3	4	5	6	7	8	9	10

Deliver of Time/Timelines

1	Educational activities are delivered on time	1	2	3	4	5	6	7	8	9	10
2	Educational activities are delivered completely.	1	2	3	4	5	6	7	8	9	10
3	The Educational activities that I have conducted are within a time frame	1	2	3	4	5	6	7	8	9	10
4	My services always being provided promptly	1	2	3	4	5	6	7	8	9	10
5	I provide service according to stipulated time	1	2	3	4	5	6	7	8	9	10
6	I always make decisions quickly when necessary	1	2	3	4	5	6	7	8	9	10

Effectiveness of Work

1	I always provide priorities to fulfill rural peoples' needs.	1	2	3	4	5	6	7	8	9	10
2	I often give special attention towards rural people demands	1	2	3	4	5	6	7	8	9	10

Part: 2
Work knowledge and skills Output

Knowledge and skill in work

1	I have understood what is required for me to do my job.	1	2	3	4	5	6	7	8	9	10
2	I have sufficient knowledge to perform the job	1	2	3	4	5	6	7	8	9	10
3	I have the required technical skills to perform the job.	1	2	3	4	5	6	7	8	9	10
4	I have used the knowledge and skills that I have to perform my duty excellently	1	2	3	4	5	6	7	8	9	10

Implementation of Policy, Procedures and direction.

1	I have carried out my job according to stipulated procedures.	1	2	3	4	5	6	7	8	9	10
2	I fully understand the appropriate policy /procedures and direction to implement the job.	1	2	3	4	5	6	7	8	9	10

Part: 3
Personal quality

-Effectiveness of Communication

1	I'm able to give my opinion effectively.	1	2	3	4	5	6	7	8	9	10
2	I'm able to understand job direction and procedures in writing and orally.	1	2	3	4	5	6	7	8	9	10
3	I'm able to communicate with my colleague effectively	1	2	3	4	5	6	7	8	9	10

Ability to manage

1	My work schedules were organized systematically.	1	2	3	4	5	6	7	8	9	10
2	My work station is well organized	1	2	3	4	5	6	7	8	9	10
3	My work station is attractive	1	2	3	4	5	6	7	8	9	10
4	My documents are up to date	1	2	3	4	5	6	7	8	9	10
5	I maintain my documents in organized manner	1	2	3	4	5	6	7	8	9	10
6	I am able to optimize the use of resources under my control to achieve organizational objectives.	1	2	3	4	5	6	7	8	9	10

Discipline

1	I usually come to work on time (punctuality).	1	2	3	4	5	6	7	8	9	10
2	I deliver educational activities as scheduled.	1	2	3	4	5	6	7	8	9	10
3	I abide by rules and regulations.	1	2	3	4	5	6	7	8	9	10
4	I have delivered my work as agreed.	1	2	3	4	5	6	7	8	9	10
5	I show persistence in delivery educational activities output.	1	2	3	4	5	6	7	8	9	10

Pro-active and Innovative

1	I am able to anticipate consequence of decision and action made.	1	2	3	4	5	6	7	8	9	10
2	I am able to suggest new idea to bring a lot of changes.	1	2	3	4	5	6	7	8	9	10
3	I am able to generate alternative ways to perform a task	1	2	3	4	5	6	7	8	9	10
4	I am willing to take the risk in implementing the new ideas	1	2	3	4	5	6	7	8	9	10

Relationship and co-operation

1	I work well with my work team	1	2	3	4	5	6	7	8	9	10
2	I share knowledge freely with my work team/organization member	1	2	3	4	5	6	7	8	9	10
3	I fully give my commitment to achieve the organization objectives	1	2	3	4	5	6	7	8	9	10
4	I maintain personal communication with members of organization	1	2	3	4	5	6	7	8	9	10
5	I establish good rapport with my colleagues	1	2	3	4	5	6	7	8	9	10