

## Gratification Obtained from Agricultural Information Disseminated through Radio among Malaysian Farmers

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### ABSTRACT

Radio is recognized to be the most suitable medium for rural advancement programs. It has potential to be the most effective media in promoting agriculture and development in rural areas, particularly as a tool for the delivery of quick information. A quantitative study was designed to determine how farmers use radio to obtain and gather information to gratify their needs. A total of 400 respondents were selected randomly from four states in Peninsular Malaysia. A multiple linear regression was used to address the research hypothesis. The outcomes of the study are expected to give a deeper understanding of how media help the farmers in meeting their information needs, how they perceive the media, and their beliefs and evaluations of the media programmes

**KEYWORDS:** Radio, agriculture development, farmers' development, agriculture information dissemination, knowledgeable farmers.

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### 1. INTRODUCTION

The agriculture industry like most developing countries plays a substantial function in Malaysia. Agricultural activities shape the basic infrastructure of rural life, contributing significantly to the condition of rural communities in terms of business opportunities, employment and quality of the environment (Muhammad, 2008). The growth and direction for this sector has been portrayed with different kinds of approaches determined by goals which are modified according to the demand of time. In rural development, information and knowledge are two important features. According to Abbas et al. (2008) inadequate information adapted to local requirements and lack of farm related scientific knowledge are the main reasons that often caused low yield and static production. Rationally, those who are connected to proper and timely information would be able to make more logical decisions than those not. Research findings from a number of agricultural based associations, mostly remain confined to farmers, and among stordinary farmers these results were seldom circulated (Abbas et al., 2008). Generally, it is agricultural extensions responsibility to transfer the research generated knowledge to the farmers with the aim of providing useful information and changing attitudes and practices. But, it appears challenging for the extension workers to reach efficiently and effectively to the farmers. In these context, mass media have the potential to offer larger extension coverage to the farmers efficiently and effectively (Mazher et. al 2003; Muhammad, 2005).

Hence, mass media are recognized as the most dominant services to disseminate most up to date agricultural technology among farmers (Ashraf, 2008). Among the various kinds of mass media, radio and television, because of their broad and extensive range of viewers, have had an unique position, and are believed as the prominent cultural and educational medium (Tancard & Verner, 2005).

Radio is recognized to be the most suitable medium for rural advancement programs (Ekoja, 2003). It bridges distances and thus has an instant effect. It has been also known as the only means of mass communication that the rural community is very familiar with (Kuponiyi, 2000). This is because a radio set is cheap to obtain and is widely owned among the rural communities. Besides, radio is favoured as a mean of communication in rural areas because of the advantages ascribed to it in form of (i) transcending the barriers of illiteracy, and (ii) demanding less intellectual exertion than the print media messages (Folarin, 1990).

Since the media penetration among the rural communities has increased tremendously over the past few years there is lack of studies in the uses and gratifications research among the farmer, it is interesting to examine how the farmers use the media above to obtain the information they need in order to gratify their needs and to know how they perceive the media. This is important because it will provide the basis to facilitate changes among the rural communities in Malaysia.

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### Malaysian Radio System at a Glance

The historical development of radio in Malaysia can be traced back to 1921, when, an electrical engineer, A.L Birch, was in charge to initiate the first radio set to the nation. In the first stage, he launched the Johore Wireless Association and began broadcasting. Subsequently, the same association was formed in Penang and Kuala Lumpur as well. Currently, there are three leading corporations that operate more than hundreds of radio channels across the Malaysia, namely Radio Television Malaysia (abbreviated RTM) which is owned by government, ASTRO (private company) and Media Prima (private company). Radio KL, Klasik Nasional and Radio Muzik (RTM), Era FM, Sinar FM and Hitz FM (ASTRO) and Hot FM and FLY FM (Media Prima) are among the most prominent radio channels manage by these corporations.

In line to further develop the agriculture sector, the department of agriculture has supplied relevant information for agriculture programs aired on government owned radio stations such as Klasik Nasional FM and four states stations namely Selangor FM, Pahang FM, Kedah FM and Perlis FM (Hassan *et al.*, 2010). In addition, the department of agriculture is the main information sources for a program called “Best Tani” aired in Klasik Nasional FM. In 2009, the Selangor department of agriculture and Selangor FM has cooperated with each other in producing a drama series that focused on paddy plantation named “A Drop of Sweat a Grain of Diamond” (Hassan *et al.*, 2010). Interestingly the CDs of this drama series were widely distributed to the farmers in Selangor. Recently, Department of Agriculture has been given a total of 9 slots in Selangor FM where the focus is the agricultural recent products and technology.

### Theoretical Consideration

The expectancy-value theory by Palmgreen was adapted as a framework for this study into exploring the respondents’ beliefs and evaluation and credibility of media programs and also gratifications sought and obtained from the media programs. The model serves as a theoretical extension to the uses and gratifications approach by providing a context for examining the social and cultural effects of radio listening as they relate to communication via the electronic media. According to the theory, exposure to mass communication results from people seeking valued consequences that they associate with particular messages or media.

The approach taken for this study is based on the theory of Uses and Gratifications Approach (U&G) by Elihu Katz, which focuses on the audience member rather than the message. The audience member is largely responsible for choosing media to meet needs and knows his/her own needs and how to meet them. In other words, out of the options that media present, the individual chooses ways to gratify needs. This may prove to be helpful in examining how the electronic media help the farmer’s keep up with their favourite programmes and gratify their information needs. Uses and gratifications have a long history within the field of communication research and have proven to be a useful model for investigating how and why people use various communication media and is applicable and appropriate for studying the uses of electronic media in gratifying needs among the rural communities in Malaysia.

Five basic assumptions have guided uses and gratifications research and spawned considerable discourse over the validity of the approach and its associated methodologies (Blumler & Katz, 1974; Katz *et al.*, 1974). Much of the attention is focused on the application of these assumptions to the study of traditional mass media use.

The first assumption of the uses and gratifications approach views the receiver of mediated messages as a part of an active audience that is goal-directed, selective, and purposeful in their use of communication media. The second assumption of uses and gratifications is that media use is the motivational outcome of the social and psychological needs of the audience.

These underlying needs serve as causal mechanisms that contribute to specific patterns of media consumption. The third assumption states that “The media compete with other sources of needs satisfaction” (Katz *et al.*, 1974). This assumption acknowledges the existence of functional alternatives that compete for the attention of the audience, and provide additional sources of needs gratification. The fourth assumption to be examined broaches a methodological concern by suggesting that audience members are capable of supplying accurate and valid accounts of their media use. This assumption addresses issues surrounding the common reliance on self-report data in uses and gratifications research. The fifth and final assumption posits uses and gratifications as a value-neutral paradigm that suspends judgment of the positive or negative consequences of media use.

According to the theory, exposure to mass communication results from people seeking valued consequences that they associate with particular messages or media (Dervin & Nilan, 1986). In other words, the theory essentially states that a person has a preconceived idea that a particular medium or message will best satisfy his needs.

An individual has a number of beliefs about a programme, and each with its own evaluation and judgments. Thus, his/her orientation to this type of programme will be determined by the entire cluster of beliefs and evaluations (Littlejohn, 2002). As one gains experience with a particular segment of the media, the perceived gratifications obtained will provide feedback to one's beliefs about that segment for future consideration.

### Research hypothesis

To achieve the objectives of this research, the following tentative hypotheses were examined:

H1: There is significant relationship between farmer's beliefs towards radio agricultural programs and gratification obtained.

H2: There is significant relationship between farmer's evaluation towards radio agricultural programs and gratification obtained

H3: There is significant relationship between farmers' assessment of credibility of information sources towards radio agricultural programs and gratification obtained.

## MATERIALS AND METHODS

A quantitative approach is felt as the ideal method to be used for this study. The study used a survey research design method that allows the inclusion of a large number of sample while considering several intervening variables. A total of 400 respondents were selected based on four zones in Peninsular Malaysia. The chosen zones are Cameron Highland (Pahang), Seremban (Negeri Sembilan), Sabak Bernam (Selangor) and Sungai Petani (Kedah). For sampling procedure; stratified random sampling has been used. During the data collection process, a number of trained and experienced enumerators were hired. Moreover, assistance from the agriculture officers, village leaders and farm leaders were gained. The enumerators took an average of 25 minutes to complete the questionnaire. A multiple linear regression analysis was used to determine the relationships between beliefs, evaluations, credibility and gratifications obtained (GO).

## RESULTS AND DISCUSSION

### Respondent's Profile:

The majority of respondents are male (76.5%) while 35.5% of the respondents are female. In addition, 32.5% of the respondents belong to the age categories of 46 to 50 years old while minority of the respondents (17.5%) were included in the age of <30 years. A large majority of the respondents are married (85.8%) and 38.8% of the respondents have 4-5 children. A quarter of the respondents (25.1%) were identified to have 1 to 5 years of experience in agricultural industry. Majority of them possess SPM/SPMV level of education (32.8%). However, only 6.5% of respondents hold Diploma certificate and another 2.0% possess Bachelor/Master/PhD certificates. Additionally, majority of the respondents (37.7%) earned a total income which is between RM501-1000 per month.

Moreover, the results revealed that a vast majority of the respondents did not listen to agricultural radiobroadcasts regularly or occasionally and out of 400 respondents only 111 of them often listen to radio programs.

### Farmer's Beliefs towards Radio Agricultural Programs

Belief measures were obtained by asking the respondents to rate "I think that Radio programs can give information" five point scales were employed ranging from "strongly disagree" to "strongly agree". Beliefs of radio programs were classified into four categories: Marketing, Pricing and Credits Info, Production info (Crops and livestock), Disease Control Info and Weather Info.

The respondents' belief scores towards radio agricultural programs have been divided to low, moderate and high scale. The sum score for each item was gained and if the score is between 36.7 – 50 ranked as high, scores between 23.4 – 36.6 ranked moderate and between 10 – 23.3 low (Table 1).

**Table 1: Distribution of Participants' Response to Beliefs on Radio Agricultural programs**

Categories	Frequency	Percentage
Low	5	4.5
Moderate	53	47.7
High	53	47.7

As been illustrated in Table 1, the outcomes of this split demonstrate that only 4.5% low, 47.7% moderate and 47.7% of respondents fall in high group.

As an overall description, the majority of respondents have moderately high level of beliefs towards radio agricultural programs broadcasted through radio.

#### Farmer's Evaluation towards Radio Agricultural Programs

Evaluations were also gained by asking the respondents to rate "I think that it is good for radio programs to give information" five point scale were used ranging from "strongly disagree" to "strongly agree". Evaluations of radio programs were classified into four categories: Marketing, Pricing and Credits Info, Production info (Crops and livestock), Disease Control Info and Weather Info.

As in Table 5 displayed, the results of this split showed that the sample average of respondent's evaluations towards radio agricultural programs were moderate. The outcomes revealed that 4.3% low, 50% moderate and 45.7% of respondents fall in high group. (Table 2)

**Table 2: Distribution of Participants' Response to Evaluation on Radio Agricultural programs**

Categories	Frequency	Percentage
Low	7	6.3
Moderate	62	55.9
High	42	37.8

The outcomes revealed that 6.3% low, 55.9% moderate and 37.8% of respondents fall in high group. (Table 2)

#### Farmer's Credibility Assessment of Radio Agriculture Programs

The credibility level of programs was obtained by asking the respondents to rate five point scales were employed ranging from "strongly disagree" to "strongly agree". A total of seven questions have been included in the questionnaire.

**Table 3: Distribution of Participants' Response to Credibility Assessment Towards Radio Agriculture Programs**

Categories	Frequency	Percentage
Low	42	37.8
Moderate	68	61.3

As demonstrated in Table 3, the outcomes of this split demonstrate that 37.8% low, 61.3 of respondents fall in moderate group. (Table 3)

#### Perceived Gratification Obtained From Radio Agricultural Programs

After measuring beliefs and evaluation, perceived gratifications obtained gained by asking the respondents to rate "I think that the agricultural radio programs have been useful" ranging from "strongly not agree" to "strongly agree"

Again, a five-point scale was used. Perceived gratifications obtained items from viewing radio were categorized into four types of radio programs: Marketing, Pricing and Credits Info, Production info (Crops and livestock), Disease Control Info and Weather Info.

**Table 4: Distribution of Participants' Response to Perceived Gratification Obtained From Radio Agricultural Programs**

Categories	Frequency	Percentage
Low	11	9.9
Moderate	64	57.7
High	36	32.4

The results for this part showed that the level of respondent's gratification obtained towards radio agricultural programs were moderate. The outcomes illustrated that 9.9% low, 57.7 moderate and 32.4% of respondents fall in high group. (Table 4)

#### Multiple Linear Regression between Gratifications Obtained from Radio, Beliefs, Evaluations and Credibility Level of Information Source

To determine the relationships of beliefs, evaluations and credibility with gratifications obtained and whether gratifications obtained influenced the farmer's beliefs and evaluations of media programs, a multiple linear regression was done. The results revealed that the regression model fit the data ( $F=43$ ,

$p > .05$ ). According to the Multiple Linear Regression result, the regression equation would be as follow:

$$Y = 1.043 + .328 (\text{beliefs}) + .346 (\text{evaluation}) + .114 (\text{Credibility})$$

**Table 5: The results of Multiple Linear Regression**

	Variables	Unstandardized Coefficients		Standarsized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.043	1.330		.785	.434
	Beliefs	.328	.099	.299	3.324	.001
	Evaluation	.348	.088	.337	3.936	.000
	Credibility	.114	.048	.199	2.395	.018

Based on the results for Multiple Linear Regression the research hypothesis would be addressed as follow:

H1: There is significant relationship between farmer's beliefs towards radio agricultural programs and gratification obtained.

The result of multiple linear regression as showed in the Table 5, show that the farmer's beliefs had positive and significant relationship toward the prediction of Gratification Obtained ( $\beta = .328$ ,  $p < .05$ ). The result indicated that when farmer's beliefs towards radio agricultural programs goes up by 1 standard deviation, perceived gratification obtained increased by .328 standard deviations. Thus, the first hypothesis of the study was supported by the data.

H2: There is significant relationship between farmer's evaluation towards radio agricultural programs and gratification obtained.

The result of multiple linear regression as displayed in the Table 5, show that the farmer's evaluation had positive and significant relationship toward the prediction of Gratification Obtained ( $\beta = .348$ ,  $p < .05$ ). The outcome revealed that when farmer's evaluation towards radio agricultural programs goes up by 1 standard deviation, perceived gratification obtained increased by .348 standard deviations. Therefore, the second hypothesis of the study was supported by the data.

H3: There is significant relationship between farmers' assessment of credibility of information sources towards radio agricultural programs and gratification obtained.

The result of multiple linear regression as displayed in the Table 5, demonstrated that the farmers' assessment of credibility for information sources had positive and significant relationship toward the prediction of Gratification Obtained ( $\beta = .114$ ,  $p < .05$ ). The result specified that when farmers' assessment of credibility for information sources towards radio agricultural programs goes up by 1 standard deviation, perceived gratification obtained increased by .114 standard deviations. Therefore, the third hypothesis of the study was confirmed by the data.

## Conclusion and Suggestions

This paper has tried to present part of the findings of a research conducted to evaluate the level of perceived gratification obtained from agricultural information disseminated through radio. The findings of the study showed that the respondents felt it was good for the electronic media, to have the most current information and issues features included in their programs. Such programs had proven to satisfy their cognitive needs in seeking for informational content. The use of electronic media such as radio had proven that informational gratifications were obtained when attending to this media.

Research on programs preferences and choices still need to be continued because the habits and preferences of the audience constantly change. Community members do not always know what they need until they discover it, or what they like until they try it. Broadcasters who constantly survey their audiences are in the best position to monitor changes, or better yet, to anticipate them. It is by recognizing that change is needed, and how people will benefit as a result of it, that successful broadcasters continue to grow and prosper. The results of the study indicate the use of electronic media to seek informational gratifications. A detailed investigation involving a qualitative approach in relation to the reasons reported by the present study will help broadcasters to develop even better programs for the farmers.

In addition, the findings of this study suggest that the model used in this study can be used in future studies to determine other needs such as affective needs, personal integrative needs, social integrative needs and tension release needs. Such study will provide an opportunity to better understand the use of media to gratify other needs among the farmers.

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