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Media Usage among the Coastal Communities in Malaysia

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Abstract

The main objective of this paper was to identify the preferred media tool and its usage among coastal communities in Malaysia. Data were collected using a questionnaire completed by a total of 210 people from the selected coastal communities. The findings indicated that people living and working in the Malaysian coastal communities, rely more on mobile phones and television to access relevant information. The results also suggest the need for improving the living standard of the rural communities living in the coastal areas of Malaysia. The use of advanced media tools could enhance living conditions and economy standards; as well as to address the communication needs in the coastal communities in Malaysia.

Keywords: media usage, coastal communities, information dissemination, community development

1. Introduction

In most rural areas around the world, people have access to information through social networks and traditional broadcast media (e.g. radio, television and fixed-line telephones). Access to telecommunications services is substantially expanding in rural areas, especially through the spread of the Internet and mobile phones (Jensen, 2007). Qiang (2009) reported that small changes in mobile telephone penetration can positively impact the economic growth of developing countries; and a similar impact can be observed from broadband penetration. Accordingly, the available empirical evidence shows that information and communication technology (ICT) has had positive impact on the economic growth of both developing and developed countries (Waverman et al., 2005; Vu, 2005; Kooshki & Ismail, 2011). Information and communication technology (ICT) is defined as a set of tools that can amplify and accelerate the dissemination and sharing of information; ICT can also facilitate communication processes, regardless of geographical characteristics (Meng et al., 2013). According to McNamara (2008), ICT can be classified into traditional ICT and new ICT. Traditional ICT includes radio, fixed-line telephones, newspapers, television and libraries, while new ICT refers to mobile phones, desktop, the Internet and fax machines. The Internet and wireless mobile phones have offered improvement of communication and resulted in cost reductions, national and global coverage, permanent availability and improved interactivity (Ssewanyana, 2007).

Malaysia has been classified as a country with an upper-middle-income economy by the World Bank (2011), with a gross national income of USD 8,770 per capita and the majority of its income being generated from oil, gas, crops, and electronic and electrical parts. Hence, Malaysia is ranked second in GNP per capita in the Southeast Asian states. Although the impact of ICT developments and infrastructure in the economic activities of Malaysia's coastal communities seems to have been overlooked, these economic activities represent a dynamic source of income in the Malaysian economy. A coastal area is broadly defined as the integration of terrestrial and marine components. The large percentage of the population in Malaysia's coastal areas undertakes different economic activities such as coastal fisheries, aquaculture, forestry and agriculture, oil and gas exploitation, shipping and tourism (Shahrizaila, 1993). The limited access to information is one of the problems that currently coastal communities are facing, and it is one of the contributing factors for these communities' low-income livelihoods.

Tacchi et al. (2003) stated that mobile phones can facilitate interactive communication flow that is unrestricted by space, volume, medium or time. For instance, fishermen can use mobile phones as an efficient way of

communicating emergency, weather and market information (Nyiri, 2005). In the Malaysian coastal communities, the traditional media tools (such as radio, television and telephones) are merely used to receive information and connect with individuals. So, these media tools seem to be of limited benefit to the communities, especially for those who require access to knowledge and information for their daily work performance. Therefore, it seems that the coastal communities could benefit from the application of advanced media (such as mobile Internet access) to expand and enlarge their connection to the world, in order to receive and disseminate information.

Overall, information leads to resources and opportunities that generate more resources and increase income; hence, the good application of both traditional ICT and modern ICT can help to alleviate poverty in developing countries through providing access to information. By understanding the current interest in and choices of media tools among coastal communities, governments and development partners can provide more opportunities that could enhance the communities' living standards and meet their needs. As a result, the living standard in these coastal communities could improve.

2. Methodology

The data collection instrument was constructed based on a review of the literature and the questionnaires used in previous studies. The resulting questionnaire was piloted among 30 coastal villagers at Kuala Paka village at Terengganu; the resulting Cronbach's alpha value exceeded the minimum of .70 recommended by Nunnally (1978). Multi-stage simple random sampling was performed, and a total of 210 respondents from three coastal villages from three different states in Peninsular Malaysia were selected. In the first stage of the sampling, all the zones in Malaysia (the southern, northern and central zones, the east coast and Sabah/Sarawak) were listed. Then, three zones were randomly selected: the northern zone, the southern zone and the east coast. In the second stage, all the states within the zones were listed: Kedah, Perlis and P. Pinang (the northern zone); Johor, Malacca and Negeri Sembilan (the southern zone); and Kelantan, Terengganu and Pahang (the east coast). Then, a state was randomly selected to represent each zone. The selected states were Kedah (the northern zone), Johor (the southern zone) and Terengganu (the east coast). In the third stage, the coastal villages of the selected states were listed and a village was randomly selected to represent each of the selected states. The selected villages were Sayak Island village (representing Kedah), Sedili Kechil village (representing Johor) and Pengkalan Atap village (representing Terengganu).

The questionnaire consisted of a demographic part (closed-ended and open-ended options) and an assessment the frequency of media usage. Respondents used a five-point Likert scales ('never' to 'frequently') to indicate the frequency in which they use different media tools like television, radio, newspapers, brochures, the Internet, mobile phones and landline telephones. The data gathered were then analyzed using descriptive (e.g., frequencies, percentages, mean scores and standard deviations).

3. Results and Discussion

3.1 Demographic Data

Table 1 displays the respondents' demographic profile; majority of the respondents (60%) were male. Overall, 22.9% of the respondents were between 41 and 50 years old and 21% of the sample was between 21 and 30 years old. The study had a slightly higher number of respondents from Kedah (35.7%), followed by Johor (35.3%) and Terengganu (29%). The most common educational level among the interviewed respondents was SPM/SPMV (Note 1) (33.8%); 25.2% of the respondents indicated to have completed primary school education and 21.9% of the respondents had obtained PMR/SRP/LCE (Note 2). Overall, 49.6% of the respondents were self-employed or working as fishermen, while very few of them were working in the government sector (2.4%). The average household income was RM 1,039.48 (roughly equal to USD 340). This figure surpasses the poverty line income set by the Economic Planning Unit of Malaysia (EPU) of RM 720 (roughly equal to USD 240) for Peninsula Malaysia (Bhaattacharjee, 2012). The majority of the participants (44.8%) were earning between RM 501 and RM 1,000 per month.

Table 1. Participants' demographic information

Age	**Frequency**	**Percentage**	**Mean**	**SD**
			37.51	15.54
15-20	37	17.6		
21-30	44	21.0		
31-40	35	16.7		

Age	Frequency	Percentage	Mean	SD
			37.51	15.54
41-50	48	22.9		
51-60	29	13.7		
61 and above	17	8.1		
State				
Terengganu	61	29.0		
Johor	74	35.3		
Kedah	75	35.7		
Gender				
Male	126	60.0		
Female	84	40.0		
Education				
No schooling	27	12.9		
Primary	53	25.2		
PMR/SRP/LCE	46	21.9		
SPM/SPMV	71	33.8		
Vocational Cert/STPM	5	2.4		
Diploma	4	1.9		
Degree/Master's/PhD	4	1.9		
Occupation				
Fisherman	52	24.8		
Government sector	5	2.4		
Private sector	29	13.8		
Self-employed	52	24.8		
Housewife/retired	48	22.9		
Others	24	11.3		
Income (n = 201)			1,039.48	700.24
<RM 500	49	24.4		
RM 501-1,000	90	44.8		
RM 1,001-1,500	37	18.4		
>RM 1,501	25	12.4		

3.2 Level of Media Usage

The media usage reported by the respondents is summarized in Table 2. The media usage was divided into three levels using the following calculation:

$$\frac{\text{Maximum mean score-Minimum mean score}}{\text{Number of levels required}}$$

The resulted three levels were as follow: (1) low level (mean score between 1.00 and 2.33), (2) moderate level (mean score between 2.34 and 3.67) and (3) high level (mean score between 3.68 and 5.00). The results indicated that the two most frequently media tools used by the respondents were television (M = 4.10) and mobile phones (M = 4.07); while radio (M = 2.56) and newspapers (M = 2.48) were used at a moderate level; and the remaining media, namely brochures (M = 1.30), the Internet (M = 1.66) and fixed-line telephones (M = 1.19), had low-level usage. The next part of the paper will focus on the two most frequently used media tools: television and mobile phones.

Table 2. Media usage among the coastal communities

Media	Mean	SD	Level
Television	**4.10**	1.08	High
Radio	2.56	1.50	Moderate
Newspapers	2.48	1.35	Moderate

Media	Mean	SD	Level
Brochures	1.30	.81	Low
The Internet	1.66	1.25	Low
Mobile phones	**4.07**	1.49	High
Fixed-line telephones	1.19	.76	Low

3.2.1 Mobile Phones

Communication through mobile phones offers numerous advantages to coastal community members who need to pursue their economic activities and social communication with people. In general, mobile phones provide coastal communities with market information, information on marketing effectiveness and social connections to people. Within the scope of this study, there are a number of possible explanations to why the respondents were using mobile phones at a high level. First, as one of the main groups of coastal areas, fishermen seem to benefit from most of the advantages offered by mobile phones. Omar et al. (2011; 2012), Jensen (2007) and Evoh (2009) affirmed that majority of fishermen use mobile phones because it allow them to share and disseminate information (market prices, current weather and fishing locations), enhance their security and safety, and enhance the quality of their communications with family members and other fishermen. A similar effect can be observed at the general community level. Another possible factors related to the high usage of mobile phones in coastal communities are the ease of the communication process, the ability to strengthen social ties, the affordable prices of mobile phones and the ability to use mobile phones as emergency tools and marketing tools (Shaffril et al., 2012; Mittal & Tripathi, 2009; Kim et al., 2007).

3.2.2 Television

Within the context of this study, television had the highest mean score in terms of usage among the coastal communities. This finding is not surprising, as television has always been the main preferred source of information among rural communities, according to Hassan et al. (2011). This is because television is considered reliable, trusted and able to fit such communities' needs and interests, particularly in relation to agricultural information. Hassan et al. (2011) added that most rural communities prefer to rely on television for their information because their preferred programs (e.g. prime news) are usually aired during the night, when most of them spend their time in front of the television. The findings of this study support those of Shaffril et al. (2012), who confirmed that agricultural communities prefer to use television as their main source of information because the programs entail visual and audio aspects. This result in a higher level of understanding of the information disseminated. Shaffril et al. (2012) added that television is preferred among rural communities, particularly older communities, as it is considered to be more user friendly compared to advanced tools such as computers and the Internet.

4. Conclusion and Recommendations

The results of this study show that television and mobile phones are the most frequently used media tools among the Malaysian coastal communities; that is, television and mobile phones are the most accessible and functional media tools in the people's lives. In line with previous studies the results indicate that mobile phones assist significantly rural communities in their daily socio-economic activities, (e.g. Hassan et al., 2011; Shaffril et al., 2012). The reasons behind the reported high usage of television among people living in coastal areas could be related to the trust and perception of television as a reliable source of information; also, television is a media tool that fulfils the communities' information needs, particularly in regard to agricultural information.

The findings of this study could be used by policy makers to develop better interventions and strategies for rural poor populations in coastal areas, through promoting the usage of both traditional ICT and modern ICT. Using advanced media tools would enhance the coastal communities' abilities to receive information and provide effective ways to connect with other communities outside the coastal area.

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Notes

Note 1. Malaysian Education Certificate/Malaysian Vocational Education Certificate.

Note 2. Malaysian Lower Education Certificate.