

Women and Radio in Semporna, Sabah – In the Name of Development Communication

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Abstract

In the context of radio, the gist of development communication is how the radio is used to aid social development. Although there are studies on radio listenership, research on women's listening habits in Malaysia is inadequate, although women are dominant radio listeners globally. This study examines factors that motivate women's listening to the radio, mainly in Semporna, Sabah. The central question is how radio has become significant among women in Semporna? This research employs a quantitative research approach. A structured questionnaire was used to obtain information from 294 female respondents. A chi-square test, factor analysis, and Kruskal-Wallis test with Bonferroni correction were used to analyse the data. The findings of the chi-square test analysis revealed a significant link between radio listening and possessing a radio set at home ($X^2 = 33.871$, $df = 1$, $p 0.05$). The Kruskal-Wallis test with Bonferroni correction was conducted to see whether the agreement score in listening to the radio for entertainment and peace of mind is different according to four factors: age, marital status, level of education and occupation. Thus, radio is no longer the primary medium to get information, except for undocumented people.

Keywords: radio; listening; women; development communication; Semporna

Introduction

The worldwide seems to be bigger without electronic broadcast technology. The invention of the radio, television and new communication technology such as satellites and the Internet makes the world smaller. Those communications and technologies help develop communication

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to grow and improve the human lifestyle significantly. In the context of development communication, it significantly influences both individual awareness and social awareness. Individuals and society learn about fashion, health, agriculture, economics, politics, and the education system from radio and television. If that information improves life quality, it can form a healthy environment in social development.

Many Asian societies are divided into gender, ethnicity, class, religion, and age groups. Interestingly, Asian countries have experienced unprecedented changes in gender dimensions over the last century, with shifting currents affecting the roles and status of men and women. Numerous gender research focuses on a medium such as television, newspaper, and magazine. Gender research on media has revealed the social construction of gendered hierarchies and practises that do not favour the diverse interest in women's lives and the critical role that media plays in providing materials linked to our making sense of our identities.

From our observations, research on women's listening habits in Malaysia is inadequate. Through Google Scholar and Dimensions AI, we search the issues by using keywords such as women, radio, listenership, and Malaysia. Then, we received 411 articles in Google Scholar and 149 publications in Dimensions AI. However, not all articles are related to our research. We conduct quality control by scanning titles and abstracts to select related articles. We discovered that only four articles related to the topic and published between 1998 to 2002 and one article in 2021. We concluded that this women's listening habits research in Malaysia is scanty. However, women are dominant radio listeners globally as discovered by Statista (2019), Skoog & Badenoch, (2020) and Ibrahim, Sulaiman, & Kamu (2021). It is helpful to stress that women's lives are highly complex and that not many studies focus on women and radio, specifically in Malaysia. Even though radio was used more than 100 years ago and became popular in this country in the early 1920s, radio is regarded as a secondary medium in Malaysia to television. The use of radio is vital in the development of communication through the circulation of knowledge, giving ideas, entertaining, and providing a segment for discussions. Furthermore, in development communication, radio is used to enhance the welfare of society and improve the standard of living is undeniable. Because of that, numerous radio researchers are discussing the radio's functions. Thus, radio players design their hot clocks, segment, and program according to their responsibilities towards societies and nations.

According to Adhikarya (1977), Asiah Sarji (1996), and Darussalam (2005), radio played an important role in national development and social changes during the early stages of radio in Malaysia. Following the formation of Malaysia, radio broadcast in various languages to promote communication through radio programmes as an information and education tool. Following denationalisation, most Malaysians frequently portrayed radio as an entertainment tool.

In this research context, radio referred to frequency modulation (FM), online radio, digital radio terrestrial and digital satellite radio. It allows the users to choose the radio medium from various media platforms to gain information, education, or entertainment. The new technology that includes radio delivery content and digital platform availability continues to grow and may change the listenership patterns. Malaysians are always welcome and committed to adopting new communication technology.

However, how does this electronic broadcast technology benefit women living in rural areas? How can radio source material provide new points of departure for women? The focus on women is significant given that we are living in a world where we are constantly bombarded with messages about women's rights, gender equality and women empowerment. Thus, this

research aims to examine the relationship between listening habits and radio roles among women in Semporna, Sabah.

Literature Review

Hernández-Ramos (1989), Gaywood (2017), and Demuyakor (2021) explain that development communication is not described as social and economic development changes per se. However, it explains individual modernisation. From the communication perspective, the gist of development communication is how media help societies develop in many significant ways.

According to Rogers (2003), development communication plays two key roles: transforming and leading to the changes; and establishing values within the society. Development communication referred to how the radio was used to facilitate individual modernisation in the radio context. At the same time, Demuyakor (2021) employed development communication to assess how community radio media outlets in Northern Ghana have boosted and strengthened political participation. Gaywood, 2017; Fombad and Jiyane, 2019; and Skoog and Badenoch, 2020; use development communication as an intervention tool (radio) in women empowerment, gender equality and discrimination.

Women continue to face significant discrimination and gender inequality in Africa (Gaywood, 2017; Fombad & Jiyane, 2019). From our reading of those research, we conclude that this is a severe issue in rural areas, where harmful traditional practices and gender norms frequently bind communities. Women's rights organisations use radio to reach out to vulnerable women who would not otherwise have access to information, such as illiterate or disabled or those in abusive relationships.

Gaywood (2017) explained that radio had become a lifeline to engage with women and girls in rural communities in Tanzania. Women spend 2.5 more hours on unpaid care and domestic chores as a result of radio campaigns, and because they often cannot leave the house to attend meetings or meet with friends, radio provides a way to stay informed for those who are at home working (Gaywood, 2017).

While in Zimbabwe, radio has become the primary source of news and information for the majority of the population, with most stations broadcasting in three languages: English, Shona, and Ndebele, with some stations even airing shows in "Shinglish," a dialectic mix of Shona and English (Gaywood, 2017). Fombad and Jiyane (2019) found that radio is the only accessible and affordable medium in rural areas, and it can play an essential role in women's rural development. In other words, radio is the quickest and most accessible mode of communication.

In India, numerous researchers such as Arora, 2019; Dutta & Thaker, 2019; Prasad & Deepak, 2019; explore the relationship and the role of community radio towards women empowerment. Their research shows that despite undergoing rapid changes and social and economic progress, there has been a radical change in women empowerment and gender equality. Women in those respective research were using radio to get and enhance their knowledge.

Dutta and Thaker (2019) draw on a culturally centred collaboration with a group of Dalit women farmers in South India who formed a cooperative to resist the corporatisation of agriculture. The underlying neoliberal assumptions that underpin the importation of cash crop agriculture into a subsistence and community-centred farming culture are disrupted by the voices of women farmers. They show how Western cash crop agriculture wreaks havoc on the

community, food security, local healthcare systems, and gender dynamics. Furthermore, the women's communication advocacy work aims to change agricultural policy by using material interventions as alternative agricultural practices to challenge the hegemony of cash-based individualised agriculture.

Subsequently, Arora (2019) emphasises the role of community radio in women's empowerment, which has resulted in a better understanding of how to use this media for development in the community. Arora discusses the role of community radio stations in women's empowerment and concludes that community radio, in particular, is an effective means of communication in communities where the majority of people are illiterate and cannot read or write, and can only speak and understand their regional languages.

Prasad and Deepak (2019) have identified six indicators from available literature, viz. social, political, economic empowerment, gender equality, participation in decision-making, and social status. By using a quantitative approach, Prasad and Deepak (2019) analysed the variables as mentioned earlier using SPSS-20 and inferences were formed pragmatically based on data acquired from women respondents active with community radio in their area of residence. Their finding shows that Political Empowerment (PE), Gender Equality (GE), and Social Empowerment (SE) all have a moderate positive link with the role of community radio (CR) (SE). At the same time, their finding shows that there is a weak positive link between indicators like Participation in Decisions (PD) and Social Status (SS). While in the inquiry phase of women empowerment, the Economic Empowerment (EE) indicator was deleted.

Prasad and Deepak (2019) have constructed a simplified relationship between the dependent and independent indicators, which helped them grasp the degree of variance in women empowerment that can be described in terms of the degree of variation in community radio indicators.

Another story in Malaysia, past research shows that the government uses radio for positive development purposes in Malaysia (Adhikarya, 1977; Asiah, 1996; Darussalam, 2005). The outcome of development communication in radio can translate from each era of radio development as mentioned by the previous scholars.

According to Adhikarya (1977), in the early 1920s, radio was used by the military and individuals who are ardour in talk radio and form amateur radio. The primary purpose of amateur radio is to inform and share the story in one way communication. Then, Asiah Sarji (1996) revealed that radio was used during the War Era in Malay Land to disseminate information about wars and the importance of fighting against colonisation. Sarji's research shows that the radio industry's boom began after the government realised the effects of electronic media on societies. Therefore, all the radio content was designed to educate and inform the communities during that time.

Subsequently, radio in the Malay Land shifts to the Independence Era and The Formation of Malaysia Era. Darussalam (2005) concluded that many radio stations formed in these two eras, and societies rely on the radio to get information, education, entertainment, and current affairs. Radio teaches how to plant, raise awareness on multi-cultural through radio documentaries and drama (Mohammad Reza & Abu Hassan, 2010; Ibrahim, 2018).

Then, the popularity of radio was disrupted by the coming of television. People shift from listening to the radio to watching television. Since then, numerous scholars have believed it is the end of the radio. Scholars are no longer interested in radio development studies since Tacchi (2000) claims radio as a second medium, Dennis and Pease (2000) portray radio as a dying medium, and Starkey mentioned radio as a fairy-tale. Those assumptions can persuade and

convince people that society no longer needs the radio. As a result, we are facing limited research materials on radio, specifically in Malaysia.

However, Ibrahim (2020) continues research on radio development, and she identifies the latest era of radio in Malaysia - The Digital Era. Ibrahim (2020) claim that the potential growth of electronic broadcast technology and the telecommunication industry spawned the birth of the digital age, which refers to the technological revolutions and the convergence that integrate and link the radio industry across the world. According to Intan, we live in a world where computers and gadgets have become part of our life; still, people listen to the radio. In other words, radio is relevant, and people can access various platforms such as satellite, digital terrestrial, social media, Internet, iPad, AirPods and apps such as Spotify and Pandora.

Ibrahim (2020) identified the changes in the conventional radio ecosystem in the digital age, different radio role trends influenced by technology, and radio production and distribution development. However, her research did not involve listeners, only industrial radio players and policymakers.

A survey conducted by the Malaysian Communications Commission in 2017 (in Ibrahim, 2020) shows that female listeners were lower than male listeners at 44.9%. However, the study only focused on listeners in Peninsular Malaysia, not involving Sabah and Sarawak. A similar survey conducted by Statista (2019) showed that active women listeners were between 35 and 64 years old in the United States. The survey showed an increase in listeners among women in 2019 compared to 2018 by 8.65%.

In another research, Ibrahim (2020) explores the acceptance of women toward radio in a digital age. The results of her research show that radio is still acceptable among women, and it may be due to the existence of various types of devices that can be used to access radio. The role of radio in the digital age has been found changed with a greater focus on entertainment purposes. However, radio still plays an essential role in delivering information and education to the community with radio content planned based on the guidelines of the Malaysian Broadcasting Department and the Malaysian Communications and Multimedia Commission.

Thus, this research will concentrate on women listening habits. The use of new communication technology in the conventional radio industry will benefit the radio player in reaching out to the listeners maximum number. However, we are curious about how women in Semporna consume the radio? Is it for individual modernisation, or radio is no longer perceived as informing tool or educational tool among women in a rural area?

Methods

This study was conducted during the Covid-19 pandemic from 13 August 2020 to 18 August 2020 by researchers using a home visitation among a sample of the women in the Semporna population of Sabah, aged 20–70. Lokasundari (2015) used the techniques of home visiting and observation to approach women in her research. Thus, this research employs a quantitative approach to identify women's listening habits in the digital age. A questionnaire was created and pretested before being used to collect relevant data.

The study population constituted all women in Semporna Sabah. From this population, 294 female respondents were selected randomly. In the end, 294 usable questionnaires were obtained. Most respondents were between 31 and 40 years of age, as might be expected. A large majority of the respondents (84%) reported they were married. The education status of the women typically was secondary school range.

Researchers carefully approach women based on observation evaluation during the fieldwork and accompanied by the opinion leaders in each village. A structured questionnaire

was used to obtain information from female respondents. However, we face challenges when undocumented persons refuse to be the respondents because they feel petrified towards the researchers.

Data were entered into an Excel spreadsheet and checked for accuracy. The data were imported into SPSS for analysis. The collected data was analysed using a chi-square test, factor analysis, and Kruskal-Wallis test with Bonferroni correction.

Hence, Covid-19 make it harder to build trust between respondents and researchers. The questionnaire focused on the demographic backgrounds, listening habits, radio role to women, motivating factors, and not listening to the radio. Covid-19 hazard assessment carefully followed during the data collection – social distancing, wearing the mask and applying hand sanitiser all time. Before and after the fieldwork, researchers undertake risk assessment evaluation and self-quarantine.

Results and Discussion

This section reports on the research findings of the relationship between listening habits and radio roles among women in Semporna, Sabah. First, the background information on the respondents is presented. This is followed by an exploration of the extent to radio listening habits and owning a radio set and its relationship between radio roles and listening habits. Lastly, the role of radio to rural women are presented.

The table below shows that 294 respondents were involved in this study and consisted of women, and the average age was 35 years. A total of 61.6% of women involved in status were married, 32.7% were single, and 5.8% were in the widowed or divorced status category. The women in this study had varying levels of education. A total of 142 respondents has secondary school education status, 89 respondents have a diploma and above, 41 have a primary school educational background, and 22 respondents have no formal education. Furthermore, 31% of the 294 respondents were housewives. This indicates that housewives are the highest respondents in this study.

Table 1. Listener's background (N=294) and listening practice

		Do you listen to the radio?					
		Yes			No		
		N	Row %	Column %	N	Row %	Column %
Age category	20 years old and below	28	66.7%	16.3%	14	33.3%	11.5%
	21-30 years old	46	56.8%	26.7%	35	43.2%	28.7%
	31-40 years old	55	63.2%	32.0%	32	36.8%	26.2%
	41-50 years old	21	45.7%	12.2%	25	54.3%	20.5%
	Over 50 years old	22	57.9%	12.8%	16	42.1%	13.1%
Marital Status	Single	62	64.6%	36.0%	34	35.4%	27.9%
	Married	100	55.2%	58.1%	81	44.8%	66.4%
	Widow/Divorcee	10	58.8%	5.8%	7	41.2%	5.7%
Level of Education	No formal education	10	45.5%	5.8%	12	54.5%	9.8%
	Primary school	21	51.2%	12.2%	20	48.8%	16.4%
	Secondary school	86	60.6%	50.0%	56	39.4%	45.9%
	Diploma and above	55	61.8%	32.0%	34	38.2%	27.9%
Occupation*	Self-employed	22	57.9%	12.8%	16	42.1%	13.1%
	Student	30	75.0%	17.4%	10	25.0%	8.2%
	Government Sector/Statutory body	31	67.4%	18.0%	15	32.6%	12.3%
	Private Sector	23	46.9%	13.4%	26	53.1%	21.3%
	Housewife	53	58.2%	30.8%	38	41.8%	31.1%
	Unemployed	13	43.3%	7.6%	17	56.7%	13.9%

*Significant at the significant level of 0.05.

The link between radio listening and age, marital status, education level, and occupation level is investigated using a chi-square test. The findings of the study revealed that only the occupation component ($X^2 = 11.532$, $df = 5$, $p < 0.05$) had a significant link with radio listening practice. Housewives, who accounted for 30.8 percent of the 172 total respondents, were found to be the most likely to listen to the radio, followed by government officials (18.0 percent) and students (17.4 percent).

We discovered that housewives prefer to listen to the radio rather than watch television because they do not have time to watch due to their busy schedules and the requirements of their children. It demonstrates that radio is a user-friendly medium to consume.

Radio listening habit & owning radio set

Findings showed values of 172 of 294 (i.e. 58.5%) respondents stated that they listened to the radio. However, only 74 of the 294 (i.e. 29.9%) owned a radio set at home. While 98 of the 294 do not own a radio set at home, they listen to the radio from the Internet, mobile phone, iPod, iPad, radio car and satellite TV set.

Table 2. Radio listening habit and owning of radio set (N=294)

		Do you listen to the radio?								
		Yes			No			Total		
Do you own a radio set at home?		Column N	Row N	Column N	Row N	Column N	Row N	Column N	Row N	
		N	N %	N	N %	N	N %	N	N %	
Do you own a radio set at home?	Yes	74	43.0%	14	11.5%	88	29.9%	100.0%	100.0%	
	No	98	57.0%	108	88.5%	206	70.1%	100.0%	100.0%	
	Total	172	100.0%	122	100.0%	294	100.0%	100.0%	100.0%	

The chi-square test analysis results showed a significant relationship between radio listening practice and owning the radio set at home ($X^2 = 33.871$, $df = 1$, $p < 0.05$). The table above showed that 58.5% (172) of the respondents listened to the radio, and 41.5% did not listen to the radio. A total of 43.0% of respondents who listened to the radio owned a radio set, while only 11.5% of respondents who did not listen to the radio owned a radio set at their home. Owning a radio set is seen as one factor influencing women's acceptance of listening to the radio.

Table 3. Radio listening habit (N=172, i.e. Only respondents who listen to the radio)

		N	%
I listen to the radio for	Less than an hour a day	47	27.3%
	1-3 hours per day	95	55.2%
	4-7 hours per day	20	11.6%
	More than 8 hours per day	10	5.8%
I always listen to the radio	6:00 - 10:00 morning	95	55.2%
	10:00 - 2:00 afternoon	30	17.4%
	2:00 - 6:00 afternoon	22	12.8%
	6:00 - 10:00 night	17	9.9%
	10:00 - 6:00 morning	8	4.7%
Favourite radio station	Era FM	80	46.5%
	Sabah FM	31	18.0%
	Tawau FM	13	7.6%
	Sinar FM	6	3.5%
	Bayu FM	3	1.7%
	Fly FM	2	1.2%
	Hitz FM	7	4.1%
	Hot FM	7	4.1%
	THR Gegar FM	6	3.5%
	lkim	1	0.6%
	Klasik	1	0.6%
	Mix FM	2	1.2%
	Nasional FM	7	4.1%
	Traxx FM	2	1.2%
	Others	4	2.3%

According to the data above, most respondents listen to the radio for 1 to 3 hours every day (i.e. 55.2 percent of the 172). The majority of respondents like to listen to the radio between 6 a.m. and 10 a.m. (55.2 percent), with the Era FM radio station being the most popular among them. Their listening habits could be ascribed to housewives' work preparation or household management.

Housewives are among the most active radio listeners, according to Skoog and Badenoch (2020). As a result, the BBC-owned radio station struggled to create appropriate programming for them. Previous research on the radio and women has revealed that this medium has been frequently used to educate women in the United Kingdom from 1923 to the present day. However, the situation in Malaysia is different. Capital FM, the country's first women's radio station, began broadcasting on February 1, 2008, but was shut down on September 30, 2015, due to financial problems. According to Ibrahim (2020), the loss was caused by a lack of acceptance among listeners, which impacted radio advertising revenue. Most radio programmes are not specific to a particular demographic or have a niche listener base, such as BFM, which is preferred by women in Semporna.

Table 4. Radio Listening Medium (N=172, i.e. Only respondents who listen to the radio)

	Average	Minimum	Maximum	Standard Deviation
I listen to the radio through the Astro TV radio set/Njoi/Home cable	3.88	1.00	5.00	1.43
I listen to the radio through the radio set at home	2.59	1.00	5.00	1.59
I listen to the radio through a mobile phone	2.42	1.00	5.00	1.47
I listen to the radio through a computer	1.94	1.00	5.00	1.27

*1=Very infrequent, 2=Quite infrequent, 3=Less frequent, 4=Frequent, 5=Very frequent

Female respondents stated that they frequently listen to the radio through Astro/NJOI/Cable TV channels at home than radio through radio sets, mobile phones, and computers. This scenario shows that new communication technologies have changed the way women listen and use the radio. The diversity of mediums for listening to the radio is a technological advantage, as Rogers (2003) mentioned through the theory of diffusion of innovation.

The role of radio to women listeners

In many countries, radio is used as a development tool to affect social changes that beneficial to communities, nations, or regions is undeniable. Radio has a prominent place for respondents (women) within the study. Radio helps illiterate listeners to gain knowledge. The radio industry must design the programs in attractive ways so that the working people could get information and entertainment during working hours.

This research found that the radio's role among women in Semporna, Sabah, is entertainment and peace of mind. Our finding contradicts what Mohd Dally, Rahmahtunnissah, Md Rozalafri, Nursyamimi, and Faizatul (2011) found in their research findings. Mohd Daly et al. (2011) found that radio plays a significant role in informing audiences. However, in our results, women listen to the radio for entertainment purposes. Thus, undocumented women listen to the radio for information and entertainment. It shows that the way women consume radio is changed.

Table 5. Purpose of listening to the radio (N=172, i.e. only respondents who listen to the radio)

	Average*	Minimum	Maximum	Standard deviation
For entertainment and peace of mind	4.47	1.00	5.00	.77
To expand knowledge about Malaysia	4.08	1.00	5.00	1.20
To develop knowledge of world affairs	3.99	1.00	5.00	1.28
To develop knowledge of local conditions in Semporna.	3.95	1.00	5.00	1.33
To strengthen family ties in sharing interests towards the same radio station.	3.68	1.00	5.00	1.37

*1=Strongly disagree, 2=Disagree, 3=Less agree, 4=Agree, 5=Strongly agree

The output shown in the table above further strengthens the findings of this study that radio serves as a source of entertainment and peace of mind. It gets the highest score from the respondents.

The Kruskal-Wallis test with Bonferroni correction is conducted to see whether the agreement score in listening to the radio for entertainment and peace of mind differs according to four factors: age, marital status, level of education and occupation.

The results shown in the table below (table 6) find that all respondents have the same level of agreement that they listen to the radio for entertainment and peace of mind, regardless of their background in terms of age, marital status, level of education and occupation.

Table 6. Kruskal-Wallis test with Bonferroni correction

		For entertainment and peace of mind	
		Average	Standard deviation
Age category [H(4) = 11.922, p = 0.09]	20 years old and below	4.4	.7
	21-30 years old	4.2	.9
	31-40 years old	4.6	.7
	41-50 years old	4.6	.7
	Over 50 years old	4.8	.5
Marital status [H(2) = 6.463, p = 0.117]	Single	4.3	.7
	Married	4.5	.8
	Widow/ Divorcee	4.8	.4
Level of education [H(3) = 4.289, p = 0.928]	No formal education	4.5	.8
	Primary school	4.7	.6
	Secondary school	4.5	.8
	Diploma and above	4.3	.8
Occupation [H(5) = 8.466, p = 0.456]	Self-employed	4.5	.7
	Student	4.4	.7
	Government Sector/ Statutory Body	4.3	.8
	Private Sector	4.4	.8
	Housewife	4.7	.8
	Unemployed	4.4	.8

Below is the list of radio programmes listened to by the listeners in Semporna, Sabah.

Table 7. Radio programmes listened to (N=172, i.e. Only respondents who listen to the radio)

	Average*	Minimum	Maximum	Standard deviation
Selection of songs by radio station	4.49	1.00	5.00	.84
Song chart	4.41	1.00	5.00	.90
News	4.06	1.00	5.00	1.08
Song request	4.02	1.00	5.00	1.19
Morning motivation	3.74	1.00	5.00	1.41
Health programme	3.70	1.00	5.00	1.33
Talk show	3.50	1.00	5.00	1.35
Weather report	3.42	1.00	5.00	1.28
Beauty programme	3.41	1.00	5.00	1.46
Cooking programme	3.40	1.00	5.00	1.51
Traffic report	3.18	1.00	5.00	1.35
Radio documentary	3.01	1.00	5.00	1.35
Radio drama	2.99	1.00	5.00	1.41
Sports news	2.94	1.00	5.00	1.34
Call-in to station and chat with the announcer (phone-in during airtime)	2.24	1.00	5.00	1.50

*1=Very infrequent, 2=Quite infrequent, 3=Less frequent, 4=Frequent, 5=Very frequent

According to McLeish (2005), radio serves as a source of information and entertainment to listeners. However, respondents in this study prefer radio as a source of entertainment because the research results found that the programme most frequently listened to is the song selection of the radio station followed by a song chart. Both programmes are entertainment-based. Programmes that contain information sources such as news, health programme, talk show, weather report, beauty programmes, cooking programmes, traffic reports and radio documentaries do not have high-frequency scores among respondents. Chatting with the announcer is the least frequently listened to the programme among respondents.

*Motivating factors on radio listening among women***Table 8.** Motivating factor for listening to the radio (N=172, i.e. only respondents who listen to the radio)

	Average*	Minimum	Maximum	Standard Deviation
1. The cost of buying a radio is cheaper than purchasing a TV or mobile phone.	3.63	1.00	5.00	1.49
2. Can be accessed and heard through various mediums such as car radio, online radio, radio via mobile phone.	4.40	1.00	5.00	.98
3. I have no choice as radio is the only available medium in my area.	2.22	1.00	5.00	1.42
4. Cannot afford to buy a TV set nor subscribe to Astro.	1.87	1.00	5.00	1.26
5. Covid-19 made me listen to the radio.	3.73	1.00	5.00	1.47
6. No exciting TV programmes.	2.78	1.00	5.00	1.39
7. I like the announcer on duty, so I listen to the radio.	3.57	1.00	5.00	1.34
8. I enjoy the announcers' banter.	3.73	1.00	5.00	1.27
9. To obtain information.	4.27	1.00	5.00	1.09
10. To find entertainment.	4.50	1.00	5.00	.77
11. To get some education.	4.09	1.00	5.00	1.21
12. To get rid of boredom.	4.34	1.00	5.00	.91
13. Listening to the radio is not a huge commitment and does not interfere with other work that I am doing.	4.27	1.00	5.00	1.04
14. To stay focused while driving.	3.55	1.00	5.00	1.38

*1=Strongly disagree, 2=Disagree, 3=Less agree, 4=Agree, 5=Strongly agree

The table above shows 14 suggested items to measure the factors that motivate respondents to listen to the radio. If analysed separately, we found out that item 10 has the highest average value at 4.50, followed by item 2 and item 12. These preliminary findings show that the entertainment factor (i.e. item 10) and access factor (i.e. item 2), as well as the factor to get rid of boredom (i.e.item 12), become the primary motivator of respondents listening to the radio. However, further factor analysis has been conducted to identify if these 14 items could be grouped to form a few more comprehensive factors.

The results of Bartlett's test of sphericity were significant at $p < 0.05$, indicating that the correlation among these 14 items was sufficient to perform factor analysis. We identified that the KMO value of 0.700 was more significant than 0.5, which meant that the data did not have multicollinearity severe problems, indicating that the 14 items were suitable for factor analysis.

Table 9. Factor analysis

Rotated Component Matrix ^a	Component				
	1	2	3	4	5
1. The cost of buying a radio is cheaper than purchasing a TV or mobile phone.					-.716
2. Can be accessed and heard through various mediums such as car radio, online radio, radio via mobile phone.	.392	-.408			
3. I have no choice as radio is the only available medium in my area.		.781			
4. Cannot afford to buy a TV set nor subscribe to Astro.		.823			
5. Covid-19 made me listen to the radio.	.513		.405		
6. No exciting TV programmes.		.516			
7. I like the announcer on duty, so I listen to the radio.			.881		
8. I enjoy the announcers' banter.			.880		
9. To obtain information.	.893				
10. To find entertainment.				.790	
11. To get some education.	.847				
12. To get rid of boredom.				.861	
13. Listening to the radio is not a huge commitment and does not interfere with other work that I am doing.				.646	.409
14. To stay focused while driving.					.682

Results of the factor analysis using the Varimax rotation procedure found that the 14 items formed five factors. These five factors predicted 67.45% overall variance of the factors that drive respondents to listen to the radio (i.e. factor 1 is 25.89%, factor 2 is 14.04%, factor 3 is 10.74%, factor 4 is 8.74%, and factor 5 is 8.03%). In comparison, others predict the remaining 32.55% besides these five factors. Factor 1 consists of items 9 and 11, factor 2 comprises items 3, 4 and 6, factor 3 includes items 7 and 8, factor 4 contains items 10 and 12, and factor 5 covers items 1 and 14. Items 2, 5, 3 and 13 have been omitted as these items could classify into more than one factor. After examining each item statement under each factor, we concluded that;

1. Factor 1 can place under the information factor construct;
2. Factor 2 can place under the capacity factor construct and the absence of options;
3. Factor 3 can place under announcer factor construct;
4. Factor 4 can place under entertainment construct;
5. Factor 5 can place under cost and driving focus construct.

We suggest that in the future, further analysis should perform to observe the relationship of the five constructs that have formed through factor analysis via respondents' background and listening habits. However, for this study, it suffices to identify the constructs of these factors.

When we first broached the idea of radio and women, the most common question we encountered was, why radio when we have television and social media? There is binge-watching, which seems to exert the most significant influence on today's women's thinking process and seeking for entertainment.

As mentioned above, radio has the broadest reach of all the media and is one of the most potent mediums for information dissemination, entertainment and education. This, despite the upsurge in communication technology, whether the information superhighway or the expansion of satellite broadcasting.

We concluded that housewives are the primary radio listeners due to radio characteristics – flexibility radio plays a significant role as a medium for women to seek entertainment compared to information. We can say that radio is an effective medium for airing women's issues and concerns. It is a means of mobilising action towards social transformation as we consider undocumented women's situation. This unprivileged group needs radio to educate them about health and women's rights regarding divorce issues and inform them where to report abuse. For documented women, they received formal education in this country.

Furthermore, their opinion leader will advise them accordingly. Even women choose radio as a source of entertainment. However, it does not represent all women in Malaysia.

Data shows a significant correlation between educational background, jobs, and motivation to listen to the radio. To examine whether the way women listen to the radio is changing, quantitative research around Malaysia should be conducted in future. We believe that women's listenership in radio continues to be challenging since radio stations need to find the women's hour. It is not easy to produce and create a program designated for women only since the listenership pattern in Malaysia is fragmented.

Radio and women in Semporna, Sabah, in particular, have described the changing modes of radio roles in their life. Even though the function of radio in Semporna, Sabah is changing, we positively say that it will not affect the existence of radio in future. Despite advances in communication technology, radio has the broadest reach and is one of the most potent vehicles for distributing information, entertainment, and education. Moreover, reading is not as established as listening; thus, there is still a great need for information-sharing through radio in the ASEAN region. Based on our research, we believe that radio's future is brighter than most people believe. Radio is accepted by listeners globally. However, we cannot deny that the role of radio is changing triggered by the listener's listening motive.

Conclusion

The role of radio in Malaysia is still considered a tool to inform, educate, and entertain. However, in Semporna, women use the radio for entertainment purposes. Radio is no longer the primary medium to get information, except for undocumented people and to reach underdeveloped communities living in rural areas and subject to digital poverty. While the relationship between listening habits and radio roles among women in Semporna, Sabah is positive.

Based on the findings, we would like to suggest; first, health campaigns such as cleanliness, mental health, Polio, HIV, AIDS, Thalassemia through radio are essential to create awareness and enhance women's health and wellbeing. From our observations during fieldwork, we spotted a few areas that need this kind of awareness. Second, create women programs instead of radio for women. Programs that focus on legal literacy, women empowerment, health, and family welfare are vital to enhancing women's quality of life in Semporna. Some of the married respondents have been abandoned by their husbands for a very long time. They do not know where to report since "no information" and "no one educates"

them on this matter. Third, the establishment of community radio run by NGOs is a good move to enhance women in Semporna Sabah.

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