FACTORS INFLUENCING THE BEHAVIORAL INTENTION TO LISTEN TO IIUM.FM AMONG NON-LISTENERS

Shafizan Mohamed 1,2
Saodah Wok 2

1,2Department of Communication, Kulliyyah of Islamic Revealed Knowledge and Human Sciences, International Islamic University Malaysia.

Email: shafizanm@iiun.edu.my Tel: +6095594295

Email: saodahwok@iiun.edu.my Tel: +60166584383

ABSTRACT

This study is part of a longitudinal study done on the audience reception of IIUM.FM, a campus radio the first study or phase 1 was done in 2011 and the second phase was done in 2016. This study specifically compares the non-listeners in Phase 1 (2011) and Phase 2 (2016) in terms of demographic characteristics, academic-related information and computer-related information. In addition, both internal and external factors that may intensify the listening to IIUM.FM are explored and so that the barriers and challenges facing the listeners are eliminated in the near future as IIUM.FM will remain as the only campus radio in IIUM. The same survey questionnaire is used in the data collection at both phases of the study. In addition to the comparison between both phases using t-test and ONEWAY ANOVA, a simple-multiple regression is conducted to determine the predictors of behavioral intention to listen to IIUM.FM. If the predictor is considered a barrier then it should be eliminated so that the listening habit of the students can be improved especially now that the radio can be listened to via multiple sources such as the app, webstream and social media. If the barriers are the reasons that prevent listening to IIUM.FM are removed, then there is a possibility that IIUM.FM are listened by many more students not only among IIUM students but also others worldwide.

Contribution/ Originality: This study has contributed in the understanding of radio reception. However, it is small in scale and is targeted to a specific radio and audience. For a more in-depth understanding of radio listenership, future research should be conducted using the qualitative method such as in-depth interview with those who are involved in the planning, the programming, the broadcasting, gathering of information, conducting the program on air, and listeners.

1. INTRODUCTION

1.1. Campus Radio

Campus radio is a type of radio station that is owned by colleges, universities or other educational institutions and most of them are run by students and faculty members. Most of the time, campus radio stations are used to train professional radio personnel, sometimes with the aim of broadcasting educational programming while other radio stations exist to provide an alternative to commercial broadcasting or government broadcasters. More specifically, many universities use their campus radio to train their broadcasting students. Campus radio offers an avenue for students to experience real-life broadcasting and audience management. It also allows the students to be more creative in developing their own unique content while being aware of the specific rules, laws and regulations...
that govern their broadcast. In countries like Ghana (Serwornoo, 2017) and Canada, Fauteux (2015) campus radio are sometimes considered as community radio. In this sense, the radio station is seen to not only serve the university community but also other nearby communities. These campus radio are expected to produce contents that are not just entertaining but also beneficial and informative to the community.

Campus radio is strategically and pedagogically beneficial. It could be an important medium for universities to reach out and to interact with their international students’ communities while promoting a “campus identity” that could help create a sense of belonging among the students, faculty members and administrative staff. According to Wilson (2015) a program dedicated to university news can be good to keep students and the wider community informed of developments at the university. Studies show that campus radio can also be politically influential when it comes to campus and even in the national election (Ashraf, 2014; Wucheng, Ling, Qingdao, & Fan, 2016).

1.2. Campus Radio in Malaysia

Campus radio stations are generally licensed and regulated by national governments (Fauteux, 2015). In Malaysia, campus radios are under the purview of the Malaysian Communications and Multimedia Commission (MCMC). MCMC approves the licences as well as the spectrum requirements for campus radios. MCMC (2007) defines campus radio “as a type of low power FM radio station that is owned and operated by the University. It shall provide a restricted FM radio service within the University campus areas and to University’s campus community only”.

According to MCMC (2007) the main purpose of the Campus Radio is to provide the opportunity for the students to gain live broadcasting training experience, promote cultural and linguistic diversity as well as to facilitate discussion and expression of opinion among the students. In addition, it also relays information, news and relevant University-based content for the campus community. Any local university interested to open and operate a Campus Radio station is required to apply a license under the Communication and Media Act (CMA) 1998.

Many public and private higher institutions in Malaysia own a radio station. However, only a small number are full-fledged broadcast radio with FM frequency. Universiti Institut Teknologi Mara (UiTM) is the first local university to have a broadcast radio station. Established in 1997, the station is a partnership with Radio Televisyen Malaysia (RTM). The radio can be tuned in at 93.6 FM. Other broadcast campus radio stations are PutraFM (Universiti Putra Malaysia), Kampus Kita FM 91.1 (Universiti Malaysia Sabah) and Uniatama.fm 97.5 FM (Universiti Utara Malaysia). Other institutions have chosen to establish online radios. To date, more than 20 colleges and universities have an online radio station (based on the authors’ own research). Online radios are comparatively easier and cheaper to establish. They are not required to get licensing from MCMC. However, they are still governed by the same programming and content requirements. For example, an online campus radio can still be summoned and penalized if it airs content that may affect issues such as ethnic relations and religious sensitivities. Online radio is also bounded by copyright laws. All campus radios are required to pay copyright bodies such as the Music Author’s Copyright Protection (MACP) a certain amount of money based on the number of copyrighted music and content they play.

1.3. Background of the Study

Founded on April 19, 2010, and officially launched on May 26, 2010, IIUM.FM is the online campus radio for the International Islamic University Malaysia (IIUM). It broadcasts 24 hours a day, everyday to a worldwide audience via internet streaming. The radio station is specifically owned by the Department of Communication at the university’s Kulliyyah (faculty) of Islamic Revealed Knowledge and Human Sciences (KIRKHS). IIUM.FM is also answerable to the Malaysian Communications and Multimedia Commission (MCMC) for compliance with all laws, rules, and regulations pursuant to the operation of the station. What is unique about the radio station is that it is entirely run by the students. Under the supervision of lecturers and staff members of the department, the students
are given the opportunities to apply what they learn in the classroom such as radio editing and media producing by managing the well-equipped radio station that has digital mixing consoles, high-quality audio equipment, and production rooms. By handling the radio’s daily operations, the students are also able to put into practice what they learn about media and communication by continually producing programs and social media contents that can inform the campus community, the public and IIUM alumni around the world regarding the university's activities, and current issues from the academic and Islamic perspectives.

It can be said that IIUM.FM is the bridge that links the university and its aspirations to the outside world. The English language is used, as the main medium of interaction and this should appeal to the global audience. At the same time, other languages are also used such as Arabic, Malay, Hindi and Mandarin. In the studio, activities include around the clock positive and meaningful music, religious sermons and talks, and interviews with prominent personalities. Outside the studio, IIUM.FM heavily covers University and Student Union events while also reporting on major news events.

1.4. The Purpose of IIUM.FM

IIUM.FM was initially established to serve as an instructional laboratory for the Department of Communication at the International Islamic University Malaysia (IIUM). It was supposed to enable the department to specialize in radio production and create many professionals in the radio industry. But soon after, it became more than just an instructional lab and was turned into the university's media outlet. The expectation placed on the station increased as the university demands that the radio become more open by providing information and entertainment programming that can meet the interest of the general public and not limited only to the university and surrounding communities.

Content wise, IIUM.FM has managed to build its own unique sound and identity by introducing and entertainment yet educational format that balances intellectual, spiritual and musical components. The radio plays all kind of content including music, Public Service Announcements (PSA), motivational capsules, religious sermons and Quranic recitations. The radio format was developed and continuously improved throughout the years following a number of research studies done by the students and staff at the department. The programming elements used by the station are similar to the ones used in the commercial radio industry. This gives the students an early industrial training that will later help them attain professional positions at any contemporary radio stations. Not just limited to music and entertainment, IIUM.FM hosts many credible talk programs that cover issues that range from the personal to the public as well as the local to the international. Prominent speakers from within and outside the campus are invited to share their thoughts and opinions on issues that affect not only the students but the community as well. The station also airs news updates twice a day, sourcing news from different news providers in an attempt to provide a more objective and an all-encompassing news and information.

1.5. Challenges of Technological Advancement

Throughout the seven years it has been in operation, IIUM.FM has gone through numerous technological change and development. In its early years of operation that is in the years before the studio was built in 2010 the radio operated in a classroom with only basic equipment. Although it was already established as an online only radio, the transmission and reception were very much restricted by the lack of equipment and limited Internet connection. A modern and well-equipped radio station was only built in May 2011. The studio boasts industry standard radio equipment and facilities that allowed it to have quality production and transmission. However, while radio production was active, audience reception of the radio was still slow mainly because of the slow campus Internet connection that was unable to support mass radio streaming (Lahabou, 2011).

Despite having provided the best equipment, the radio was affected by the rapid changes of Internet technologies on many occasions. In 2015 for example, the radio transmission was affected by the slow demise of the...
‘Microsoft Media System’ which it uses. The Microsoft system was not dynamic and therefore was not compatible in the changing Internet environment that works on many open platforms such as Firefox, Chrome, and Android. Due to this the radio can only be streamed via Microsoft’s Internet browser that is Internet Explorer at the time. This became a problem, as Internet Explorer was no longer popular with the masses. People were no longer using Internet explorer and hence were not able to stream the radio. In addition to this issue, the Microsoft system did not support mobile technology and this limited IIUM.FM streaming to laptops and computers only. The radio cannot be heard via mobile devices. This was a major hindrance as most Internet users were mobile and were mostly dependent on their Smartphones and mobile devices. IIUM.FM needed to have its on application as it has become the most effective and efficient method for online radio as it allows for fast, simple, mobile and interactive connection for the audiences.

Because of budget constraints, the radio was not able to buy new equipment and software. However, with the assistance and cooperation the university’s own technology experts such as students and lecturers from the Kulliyyah of Engineering and the Information and Technology Division, IIUM.FM managed to overcome the system’s issue by replacing the Microsoft system with open source technologies that were more flexible and compatible with the continuous rapid technological changes. In response, by mid-2016, the radio successfully streamed via all Internet browsers. IIUM.FM is also now available in the form of an application via play store. To date, the IIUMFM app is only available for Android users. The budget constraint has restricted it from being available on the Apple platform. The radio app now has more than 500 downloads and has 4.8-star ratings.

With the increased significance of the social media, especially in Malaysia where people are very much connected to Facebook and twitter (Wok & Mohamed, 2017) it became important for the station to focus on its social media. As such the radio has set up its own social media team that works on maintaining and promoting both the radio and its social media. Because of this effort on the part of the radio team, IIUM.FM has become more noticeable online with almost 5700 followers on Facebook, 3600 followers on Instagram, 2400 followers on Twitter and 500 subscribers on YouTube. In 2017, the radio started shifting its focus to video by operating via Facebook, Instagram and YouTube live. It can also be video streamed via Ustream.

1.6. Problem Statement

In the second phase of the longitudinal study on IIUM.FM, it was discovered that despite the six years of its establishment and the improvement in radio streaming technologies, the number of IIUM.FM non-listeners is still large among the university students more specifically students from the Kulliyyah of Human Sciences (Mohamed, Wok, & Lahabou, 2017). This is a problem for the station as it is supposed to be the university’s main media. With the university’s increasing number of students and staff, IIUM.FM should be able to attract more listeners. Unfortunately it has yet to do so. The university especially finds issue in this simply because they have invested so much to set up the radio station and is incurring annual cost to keep the radio running. Therefore, it expects the radio to be able to engage with the students and even attracts listeners outside the campus so that the both the IIUM community as well as the society at large are in tune with the university's activities. At the same time, the kuliyyah of the faculty in which IIUM.FM is part of wants to ensure that the radio can become a training hub for all its students regardless of their specialization. The Kulliyyah of Islamic Revealed Knowledge and Human Sciences is the biggest faculty at the university. It has 11 different and unique departments that include psychology, sociology, comparative religion, Arabic language and literature. With the undeniable importance of the mass media in the contemporary world, the kuliyyah wants to optimize the use of the radio so that it could also provide media training and exposure to these other departments. A high listenership is vital to provide these different departments the opportunity to offer radio programs that are varied and unique in nature. If the listeners are confined to a small group of students with similar demographic, there will not be enough interest for programs of different focus.
Therefore this study can help resolve this problem by will be able to identifying the reasons why some students are not listening to the radio. Although significant improvement has been made especially in terms of the ways the radio can be listened to, it seems that the students are still not driven enough to listen. If the issues of slow internet connection in the campus and the limited ways of accessing the radio were among the main reasons why students were not listening in 2011 (Lahabou, 2011) what could be the reasons now. The radio can now be listened to via its own application, web streaming and on social media particularly Facebook. In addition, this study will be able to test the Reason Action Theory by explaining how different factors affect the radio’s listenership. For example, what are the factors that prevent the potential audience from listening to IIUM.FM? If behavioral intention is reflective of the actual behavior, so what drives the non-listeners to listen to IIUM.FM to listen to it?

1.7. Research Objectives

Based on the problems stated above, here are the objectives that drive this study:

(1) To compare the demographic characteristics, academic-related information and computer-related information of non-listeners.
(2) To compare the reasons that prevented listening to IIUM.FM.
(3) To compare the behavioral intention to listen to IIUM.FM.
(4) To explore factors (internal and external) that motivated the non-listeners to have the intention to listen to IIUM.FM.
(5) To determine the predictors for behavioral intention to listen to IIUM.FM.

1.8. Significance of the Study

This study is significant in multiple ways. First, it is able to identify the factors preventing the students from listening to IIUM.FM. Thus, it will be able to offer suggestions into how to overcome the different barriers to listenership whether the problems are internal or external. The study could also offer ideas on how to motivate the students to listen to IIUM.FM. These suggestions can be very useful for the management of the radio and the university in general.

Second, the study could provide insights for the radio industry in general. In today’s world where media products are very much saturated, media outlets such as radio stations are faced with the challenges of garnering audiences. Radio listeners for example are now spoilt with choices that many stations are forced to become very segmented and specialized and be contented with a small number of listeners. Therefore by understanding the reasons that motivate and demotivate listenership, the radio industry can outline strategies that can help retain their listeners. As such this study should be able to inform the industry about the nature of new radio listeners and how to respond to them.

Third, since this is an academic study, it could add to the understanding of new media technologies by scrutinizing the viability of using the Reception Action Theory (RAT) in explaining how RAT variables explain audience motivation and behavior.

2. LITERATURE REVIEW

2.1. The Reason Action Theory

Reasoned Action Theory (Fishbein & Ajzen, 1975) is one of the classical models of persuasion. It is widely used in communication. Basically, the theory helps to explain the relationship between attitude and behavior within human action. The theory predicts that individual will behave according to their attitudes and behavioral intentions. Ultimately, the planned behavior will be performed based on the intention. Intention refers to the cognitive representation of a person’s readiness to perform a given behavior, and it is considered as the immediate determinant of a particular behavior (Park, 2007). It is an indication of how hard a person is willing to try and how
much an effort he/she is planning to exert his/her effort to perform the intended behavior. Thus, behavioral intention is the subjective probability of one’s engagement in a particular given behavior (Fishbein & Ajzen, 1975).

The TRA is one of the most popular theoretical frameworks to understand one’s behaviors based on attitudinal and social factors (Ajzen & Fishbein, 1980). The TRA includes an individual’s intention to perform a behavior, attitudes toward the behavior, and subjective norms, in that an individual’s intentions to perform the behavior in question are determined by attitudes toward the behavior and subjective norms (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

According to Kim, Lee, and Yoon (2015) attitudes toward the behavior refers to the overall evaluations of the performance of a behavior in question, and subjective norms refers to perceived pressure from relevant social networks. Generally, individuals who have more favorable attitudes and perceive stronger subjective norms regarding a behavior are more likely to show greater intentions to perform that behavior. In short, Young and McComas (2016) explained that theory of reasoned action takes into consideration attitudes and beliefs that an individual has about a behavior, as well as perceived social norms and evaluations of potential outcomes in relation to intentions to perform the behavior (Ajzen, 1985, 1988; Fishbein & Ajzen, 1975, 2010).

In the case of IIUM.FM, for example, social norms related to media consumption may influence the uptake of information either by reinforcing or discouraging listening and adoption behaviors. In addition to social norms, Ajzen. (2002) discussed the importance of considering both internal (self-efficacy) and external factors when considering how individuals might evaluate potential outcomes. Young and McComas (2016) noted that challenges in innovation adoption may arise from not only an individual’s sense of self-efficacy, meaning the individual’s belief in his or her ability to plan and carry out a behavior, but also external factors beyond individual control, such as the weather or climate change in the case of agriculture. Similarly, in relation to this study, both internal and external factors are important in order to identify the behavioral intentions that can derive the non-listeners to listen to IIUM.FM. The higher the behavioral intention, the higher is the possibility of performing the intended behavior. In this study, behavioral intention to use is defined as a measure of the strength of one’s intention to perform a specific behavior, in this case, to listen to the IIUM.FM. Specifically, it is the strength of a student’s intention to listen to IIUM.FM in the future. For this study, it is the dependent variable.

Many contemporary researches have shown that attitudes toward the behavior and subjective norms influence media related intentions such as to accessing health information (Montano & Kasprzyk, 2015) to like Facebook pages (Kim et al., 2015) to listen to agricultural radio programming (Young & McComas, 2016) to accept green information technology (Mishra, Akman, & Mishra, 2014) and to shop on Instagram (Pookulangara, Parr, Tanoff, & Nix, 2017).

2.2. Factors Influencing the Behavior Intention to Listen to IIUM.FM

For this study, three internal and external factors were identified as influencing the behavioral intention to listen to IIUM.FM. The three factors are demographic characteristics (internal), academic related information (external) and computer ownership (external). The internal factors here focus on the non-listeners gender, age and nationality. Since the university has a large number of international students, the non-listeners were divided into two main groups, which are the local Malaysian students, and International students that come from many different countries. Academic related component will inquire about the non-listeners status within the university, which includes the department they belong to and their level of studies. Another external factor considered in the study is the computer related issues. More specifically the study asks about the respondents’ ownership of computers and other related devices as well as the availability of Internet connection. These three factors and their corresponding variables will be tested to see whether they influence and affect the non-listeners listening behaviors. The three factors will also be tested together to see whether the relationship is positive or negative.
2.3. Conceptual Framework of the Study

Based on the literature, the conceptual framework Figure 1 is developed, involving demographic characteristics, academic-related information and computer ownership with behavioral intention to listen to IIUM.FM.

![Figure 1. Conceptual framework for factors influencing behavioral intention.]

2.4. Hypotheses of the Study

Based on the conceptual framework of the study, the following hypotheses are developed.

GH1: There are differences between the various demographic characteristics of the non-listeners in terms of behavioral intention to listen to IIUM.FM.

SH1.1: There are differences between male and female non-listeners in their behavioral intention to listen to IIUM.FM.

SH1.2: There are differences between Malaysian and International non-listeners in their behavioral intention to listen to IIUM.FM.

GH2: There are differences between the various academic-related information characteristics of the non-listeners in terms of behavioral intention to listen to IIUM.FM.

SH2.1: There are differences between the various departments of the non-listeners in terms of their behavioral intention to listen to IIUM.FM.

SH2.2: There are differences between the various levels of study of the non-listeners in terms of their behavioral intention to listen to IIUM.FM.

GH3: There are differences between the various computer-related information characteristics of the non-listeners in terms of behavioral intention to listen to IIUM.FM.

SH3.1: There are differences between computer ownership characteristics of the non-listeners in terms of their behavioral intention to listen to IIUM.FM.

SH3.2: There are differences between the various Internet connection characteristics of the non-listeners in terms of their behavioral intention to listen to IIUM.FM.

GH4: There are associations between behavioral intention to listen to IIUM.FM and the inner factors (gender, age, nationality, level of study) and the external factors (computer ownership and having the Internet connection).
GH 5: There is a negative relationship between reasons preventing listening and behavioral intention to listen to IIUM.FM.

3. METHODOLOGY

The study uses a quantitative research design with a cross-sectional survey method using a self-administered questionnaire as the data collection tool to the undergraduate students enrolled in the Human Sciences Division of the Kulliyyah of Islamic Revealed Knowledge and Human Sciences (KIRKHS) at the IIUM Gombak Campus.

3.1. Population and Sampling Procedure

At Phase 1 (Semester 1, 2010/2011), HS Division has 2487 undergraduate students while at Phase 2 (Semester 1, 2016/2017, HS Division has a total of 5000 undergraduate students. A stratified random sampling was employed for both phases, where the stratum used is the department. There are six departments: Communication, English Language and Literature, History and Civilization, political Science, Psychology, and Sociology and Anthropology. A sample of 467 undergraduate students participated in the study.

3.2. Research Instrument and Measurement of Variables

The study uses a questionnaire as the research instrument for data collection. The same questionnaire is used for the Phase 2 data collection. It consists of nine sections: Section 1 for elucidating the demographic characteristics of the respondents, computer ownership and the Internet connect with sub-section on utilization of IIUM.FM. Section 2 on knowledge; Section 3 on perceived usefulness of listening (POUL) to IIUM.FM; Section 4 on perceived ease of listening (PEOL) to IIUM.FM; Section 5 on attitude towards listening to IIUM.FM; Section 6 on actual listening to IIUM.FM; Section 7 on comments and suggestions; Section 8 on reasons that prevent from listening to IIUM.FM; and Section 9 on behavioral intention. For this paper, only Section 1, Section 8 and Section 9 are used for comparison purposes.

Behavioral intention to listen is the degree of the non-listeners intention to listen to IIUM.FM and it is assess with 12 items on a five-point Likert scale where 1=strong disagree, 2=disagree, 3=slightly agree, 4=agree, and 5=strongly agree. An example of the item is "I will listen to the IIUM.FM frequently". There are 8 comparable items for Phase 1 and Phase 2 of the study. Summated score of behavior intention was computed to obtain the mean score.

3.3. Validity and Reliability of the Measurement

The face validity is obtained through an expert opinion of the items. This research uses the most popular inter-item consistency reliability, that is, the Cronbach’s coefficient alpha. The closer the reliability coefficient gets to 1.0, the better is measurement items. Since this paper analyses the non-listeners, therefore, there is only one construct used – the behavioral intention to listen to IIUM.FM with 12 items with Cronbach’s alpha of 0.93 at Phase 1 and alpha of 0.95 at Phase 2.

3.4. Data Collection

The data collection for the Phase 1 was conducted from October 4–7 2010 to generate a total of 467 respondents with 238 listeners (51.0%) and the rest 229 non-listeners (49.0%). For Phase 2, from a total of 468 respondents, 272 are listeners (58.1%) and 196 are non-listeners (41.9%) that are used for comparison purposes. The proportion of listeners has increased over the years, from 51.0% to 58.1% with an increase of 7.1%.
3.5. Data Analysis

Data were analyzed using both descriptive and inferential statistics. For descriptive statistics, frequency, percentage, mean, standard deviation, minimum and maximum are used to describe the differences in the proportion between the two sets of data at Phase 1 and Phase 2. For the inferential statistics, a paired t-test is used to gauge the differences in mean between the two sets of data. In addition to independent t-test (gender, nationality, computer ownership and Internet connection) and ONE WAY ANOVA (department and level of study) that are used to test for the difference between the selected groups, a simple multiple regression analysis is performed to determine the factors that influence and predict behavioral intention to listen to IIUM.FM. In order to perform such analysis, the gender, nationality, computer ownership and Internet connection are coded into dummy variable having a value of 1 as either male, Malaysian, having a computer and the computer is connected to the Internet. Hence, female, International student, without any computer and without the Internet connection are coded as zero (0).

4. FINDINGS

4.1. Demographic Characteristics of Non-listeners

A comparison is made between Phase 1 and Phase 2 for the demographic characteristics of the respondents. Even though there are more non-listeners at Phase 1 (n=229) compared to Phase 2 (n=196), the proportion of females to males is similar. There are more female non-listeners and male non-listeners. However, the proportion of females at Phase 1 (77.7%) has been reduced to 73.0% at Phase 2 while the reverse happens for the male non-listeners, an increase of 4.7% from 22.3% at Phase 1 to 27.0% at Phase 2. As for the age, there were younger non-listeners at Phase 1 (67.2%) compared to Phase 2 (38.8%) while for the older listeners tend to be more at Phase 2 (61.2%) than at Phase 1 (32.8%). The proportion of Malaysian non-listeners has lessen from 86.9% at Phase 1 to 79.1% at Phase 2, yet still remain more that the international undergraduate non-listeners. At the time, the proportion of the international non-listeners has increase form 13.1% at Phase 1 to 20.9% at Phase 2. This implies the trend is similar from Phase 1 to Phase 2 for gender and nationality but this does not hold true for the age group whereby the reverse has happened. At Phase 1, there were more non-listeners for the younger group while for Phase 2; more non-listeners are found to be older students.

4.2. Academic Profile of Non-listeners

The academic profile of the respondents slight varies in terms of department and level of study. There is more Communication students at Phase 2 (56.1%) compared to Phase 1 (16.6%) and IRK students (11.7%) at Phase 2 than at Phase 1 (3.1%). The reverse occurs for other departments. There are more students at Phase 1 coming from the English Language and Literature (29.7%), History and Civilization (10.9%), Political Science (9.2%), Psychology (20.5%) and Sociology and Anthropology (10.0%) than Phase 2. With regarding to level of study, at Phase 1, the number of first year students (46.3%) is more than at Phase 2 (19.9%). However, the number of second year students (39.3%) is more at Phase 2 than Phase 1 (34.1%). Similarly, for third year, the number is more at Phase 2 (22.4%) than at Phase 1. This goes to fourth year students where the number is more at Phase 2 (18.4%) than at Phase 1 (10.4%).

4.3. Computer-Related Information

Two questions are asked pertaining to computer-related profile of the respondents. Almost of the respondents owned a computer at Phase 2 (98.0%) and their computers are connected to the Internet (96.9%). However, the majority of respondents own a computer each (88.2%) that is connected to the Internet (81.2%). This means that nowadays, computer is a must for the students and their computers are mostly connected to the Internet.
4.4. Reasons that Prevent Listening to IIUM.FM

Despite the fact that the students' computers are connected to the Internet, not all of the students who participated in the study listen to IIUM.FM. The non-listeners for Phase 1 comprises of 229 and at Phase 2, there is slightly less, with only 196 non-listeners.

The reasons for not listening to IIUM.FM are compared and results in Table 1 show that their reasons vary. At Phase 1, the reasons are mainly that they lack of time (69.0%), they do not know about IIUM.FM (38.4%), they experience a reception problem (37.6%), they do not have a laptop (11.4%), they think that IIUM.FM focuses more on webcasting (23.1%), and they think that IIUM.FM is not beneficial for them (17.5%). At Phase 2, on the other hand, the reasons are slightly different. Their reasons are that they think that IIUM.FM is not interactive (31.6%), the programs are of poor quality (26.5%), the programs distract them from focusing on their studies (16.8%) and they could easily understand the English language used (5.6%). From the results it can be seen that the reasons that prevent listening to IIUM can considered as internal factor, that is, related to the students themselves and also external factors, that is, external and beyond the control of the students themselves. Both internal and external factors are related to one another and they are combined together as an entity.

Table 1. Reasons that prevent listening to IIUM.FM

| No. | Reasons preventing listening | Phase 1 (n=229) | Phase 2 (n=196) |
|-----|------------------------------|----------------|----------------|
|     | Frequency | Percentage | Frequency | Percentage |
| 1   | I did not know about it (I) | 88 | 38.4 | 45 | 23.0 |
| 2   | Reception problems (E) | 86 | 37.6 | 68 | 34.7 |
| 3   | Poor quality of its programs (E) | 35 | 15.3 | 52 | 26.5 |
| 4   | Lack of time (I) | 158 | 69.0 | 131 | 66.8 |
| 5   | I don't have a laptop (I) | 26 | 11.4 | 7 | 3.6 |
| 6   | I cannot easily understand the English used (I) | 11 | 4.8 | 11 | 5.6 |
| 7   | It distracts me from focusing on my studies (E) | 29 | 12.7 | 33 | 16.8 |
| 8   | It is not beneficial for me (E) | 40 | 17.5 | 30 | 15.3 |
| 9   | It focuses more on webcasting music (E) | 53 | 23.1 | 41 | 20.9 |
| 10  | It is not interactive (E) | 57 | 24.9 | 62 | 31.6 |
|     | Total | * | * | * | * |

Note: *Multiple responses; I=internal reason; E=external reason.

4.5. Behavioral Intention to Listening to IIUM.FM

Eight items are compared between Phase 1 and Phase 2 for its means difference. The results described in Table 2 indicate that all item means have decreased to a certain extent. Specifically, the means difference are calculated manually since Phase 1 data are not accessible and the results are based on Lahabou (2011). The results are calculated based on non-listeners using the following formula:

\[ t = (\text{Mean}_1 - \text{Mean}_2) / \sqrt{\left(\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}\right)} \]

Where: Mean1 is the mean score for Phase 1 and Mean 2 is the mean score for Phase 2; s1^2 is the variance for Phase 1 and s2^2 is the variance for Phase 2; and n1 is the number of cases for Phase 1 and n2 is the number of case for Phase 2.
Results show that there is a decrease in the number of respondents who pledge to listen to IIUM.FM. Specifically, the number of respondents has lessened for their willingness to listen to IIUM.FM: once I know its website ($t=2.196, p<.05$); whenever I log on the Internet ($t=4.603, p<.05$); whenever I am free ($t=2.028, p<.05$); and to be a loyal listener to IIUM.FM ($t=3.878, p<.05$); ($t=2.196, p=.05$). Even the overall intention to listen to IIUM.FM has reduced ($t=3.426, p<.05$).

Despite the time of the study, the behavioral intention can motivated by the respondents willingness to listen IIUM.FM’s religious programs, listen to it I the near future, and will listen to it once they know its website, whenever they are free and to IIUM’s music regularly. The intention can be considered as a promise to the actual behavior once the requirement and the pledge are met. However, the respondents at both Phase 1 and Phase 2 can promise that they will listen to IIUM.FM’s talk shows frequently, whenever they log on the Internet and be loyal listeners to IIUM.FM.

4.6. Comparison within Factors Influencing Behavioral Intention to Listen to IIUM.FM

The factors influencing intention to listen to IIUM.FM are mainly the internal factors (personal traits and academic-related information) and external factors (computer-related information). The internal factors are the personal attributes (gender, age and nationality) and the academic-related information (department and level of study) while the external factor is mainly the computer-related information. Both t-test (independent t-test) and ONEWAY ANOVA are performed to determine the factors influencing the intention to listen to IIUM.FM.

Table 3 show that there is no difference between males ($M=2.922, SD=0.778$) and females ($M=3.107, SD=0.687$) despite the fact the females are more like to listen to the IIUM.FM compared to the males ($t=−1.592, p=.113$). Results show that there is a difference between the Malaysians ($M=3.126, SD=0.672$) and the international students ($M=2.797, SD=0.816$) when their difference is significant ($t=2.632, p=.009$). The Malaysians have the intention of listening to IIUM.FM more than the International students.

Despite the fact that IIUM.FM is under the purview of the Department of Communication but all HS Division students are allowed to participate while the Communication students are encourage to take part especially those under the Electronic Media Specialization. Nonetheless, there is difference in terms of department as there is no significant difference between them ($F=1.083, p=.374$). However, year of study shows a significant difference between Second Year students ($M=3.288, SD=2.797; F=4.400, p=.005$). Year of study explain for 6.5% of the
behavioral intention to listen to IIUM.FM. Nonetheless, there is no aspects of the external factors are significantly different.

4.7. Relationship between Factors Influencing and Behavioral Intention to Listen to IIUM.FM

All factors influencing the behavioral intention to listen to IIUM.FM are tested for their relationship with one another in Table 3. However, only the factors influencing the behavioral intention to listen to IIUM are explained in detail.

The factors that are significantly related to behavioral intention to listen to IIUM are nationality and level of study. It is found that Malaysians are more likely to listen to IIUM.FM than the international students ($r = .187$, $p = .005$). Their relationship is weak positive. In terms of the level of study, those in the lower level of study are more likely to listen to the IIUM than those in the higher level of study ($r = -.179$, $p = .006$). This is because their relationship is weak negative.

The correlation between reasons that prevent listening to IIUM.FM ($M = 2.462$, $SD = 1.825$) and behavioral intention ($M = 3.058$, $SD = 0.715$) is weak, negative significant ($r = -.255$, $p = .000$). This means the less is the number of reasons that prevent listening to the IIUM.FM, the higher is the behavioral intention to listen to IIUM.FM. Therefore, it is suggested that is possible all the reasons that prevent the listening should be eliminated.

| Variable (N=193) | Intention | Gender | Age | Nationality | Level of study | Computer ownership | Internet connection | Reasons that prevent listening |
|------------------|-----------|--------|-----|-------------|----------------|-------------------|---------------------|------------------------------|
| Behavioral intention | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Gender (1, 0) | $r = -.141$, $p = .025$ | $r = -.129$, $p = .037$ | $r = -.156$, $p = .015$ | 1 | 1 | 1 | 1 | 1 |
| Age | $r = -.105$, $p = .072$ | $r = -.124$, $p = .043$ | 1 | 1 | 1 | 1 | 1 | 1 |
| Nationality (1, 0) | $r = -.187$, $p = .005$ | $r = -.244$, $p = .000$ | $r = -.156$, $p = .015$ | 1 | 1 | 1 | 1 | 1 |
| Level of study | $r = -.179$, $p = .006$ | $r = -.141$, $p = .025$ | $r = -.129$, $p = .037$ | $r = -.124$, $p = .043$ | 1 | 1 | 1 |
| Computer ownership (1, 0) | $r = -.056$, $p = .218$ | $r = -.160$, $p = .13$ | $r = -.017$, $p = .409$ | $r = -.074$, $p = .152$ | $r = -.165$, $p = .011$ | 1 | 1 | 1 |
| Internet connection (1, 0) | $r = .025$, $p = .365$ | $r = -.096$, $p = .093$ | $r = .009$, $p = .450$ | $r = -.092$, $p = .103$ | $r = .159$, $p = .014$ | $r = -.393$, $p = .000$ | 1 | 1 |
| Reasons that prevent listening | $r = -.255$, $p = .000$ | $r = -.020$, $p = .89$ | $r = -.117$, $p = .053$ | $r = -.074$, $p = .153$ | $r = .082$, $p = .128$ | $r = -.001$, $p = .494$ | $r = -.001$, $p = .493$ | 1 |

4.8. Predictors for Behavioral Intention to Listen to IIUM.FM

Further analysis using a simple multiple regression is performed to determine the predictors of behavioral intention to listen to IIUM.FM in Table 4. Results show that to a certain extent to intention to listen to IIUM.FM already exist as reflected in the constant ($t = 5.292$, $p = .000$). The best predictor is to eliminate the reasons that prevent listening to IIUM.FM (Beta=-.261, $t = -3.825$, $p = .000$), followed by nationality (Beta=.216, $t = -3.021$, $p = .003$), and level of study (Beta=-.204, $t = -2.878$, $p = .004$). This means that the Malaysians are more likely to listen to IIUM.FM that the International students. In addition, the students who are registered in the lower level of study are more likely to listen to IIUM.FM than the higher level of study.
Table 4: Regression analysis for behavioral intention and selected variables.

| Model | Variable          | Unstandardized coefficient | Standardized coefficient |
|-------|-------------------|----------------------------|--------------------------|
|       |                   | B  | Std. Error | Beta | t    | p    |
| 1     | Constant          | 3.265 | .617 | 5.292 | .000 |
|       | Gender            | -.097 | .115 | -.060 | -.841 | .401 |
|       | Age               | -.019 | .020 | -.068 | -.966 | .335 |
|       | Nationality       | .380 | .126 | .216  | 3.021 | .003 |
|       | Level of Study    | -.144 | .050 | -.204 | -2.878 | .004 |
|       | Computer ownership| .396 | .373 | .079  | 1.063 | .289 |
|       | Internet connection| .166 | .303 | .041  | 0.549 | .584 |
|       | Reasons           | -.103 | .027 | -.261 | -3.825 | .000 |

Note: F=5.153, df=7,185, p=.000; R=.404, R²=.163, R² Adj=.131.

5. DISCUSSION AND CONCLUSION

This study starts with acknowledging that there are still a significant number of students who are not listening to IIUM.FM, the campus radio. Despite the time difference, both studies conducted found that the numbers of non-listeners are still very high. In the initial study conducted in 2011, 229 (49%) or almost half out of the 467 respondents did not listen to the radio. In this 2016 study, 196 or 41.9% out of the 468 respondents are non-listeners. Although there is a decrease in the percentage of non-listeners that is from 49% to 41.9%, the fall is not significant enough indicating that after almost 5 years, the radio did not manage to attract majority of the students to become listeners. Despite a formidable improvement in the ownership of computers and better internet connection, the students are still indicating that they are not motivated enough to listen. The study found that despite the decreasing reasons preventing the respondents from listening to the radio, the intention to listen to the radio is not improving but rather deteriorating (refer Table 4). This means that the students are simply not motivated to listen to the radio even though they now have better access to technology and less internal and external barriers. As such the radio management needs to really consider why the students are not driven to listen to the radio. For example, publicity and the promotional announcement should be aggressively done to encourage more listenership. The content and programming should also be more competitive and attractive to the students. This is important especially when there are so many other media outlets that are taking the students’ interest.

The study is not without its limitation. One of its limitations is that the study is confined mainly to those students in Human Sciences Division of the Kulliyyah of Islamic Revealed Knowledge and Human Sciences. Therefore, future study pertaining to IIUM.FM should be extended to other faculties (kulliyyah) and other branches of IIUM Campuses such as at Kuantan Campus, Jalan Duta Campus, and Gambang Campus. This is because the content of the programs is not limited to IIUM Gombak Campus only, but it goes beyond it. Anyway, the program can be listened to online, meaning that everywhere where there is Internet connection. Another shortcoming is that the study is not able to address the significance of social media followers. Today’s media ratings not only include actual numbers of listenership but also the numbers of followers on the social media. This is because, in commercial radio, social media ratings are also used to attract advertisers (Mohamed & Azzman, 2018). Social media followers are also informed about the radio’s content and programming as they are constantly updated via the social media. As such, while the number of listeners of IIUM.FM does not indicate the major increase from 2011, IIUM.FM managed to gather a significant number of followers on the social media which was non-existent 6 years ago. Therefore, in future, the study should address more than just listenership but also consider radio exposure and reception via the social media. A new model of measuring radio reception that goes beyond listenership will also help the radio industry in general to understand the new patterns in the relationship between audiences and technological change.

In short, when considering only the listenership, the acceptance of IIUM.FM does not experience a significant change from 2011. As such, more effort must be taken to ensure that consistent increase in listenership is achieved.
While it has been stated that there are other important indicators such as the social media reach that should be considered, listenership is evidently the main business for radio. As such, IIUM.FM needs to take all actions, either in the form of promotion or a new method of programming. Students involved in the radio must be trained to understand that technological advancement highly impact listenership and as such, they need to always be alert and informed of new technological updates.

It should be interesting to explore the potential of improving the programs to suit to the needs of the audience and to catch their attention. Possibly, another possibility is to have a content analysis of the comments and suggestions given in the IIUM.FM Facebook and Instagram.

**Funding:** This research paper is funded by the International Islamic University Malaysia’s Research Management Centre under the IIUM Research Acculturation Grant Scheme (Project ID: I-RAGS18-002-0003).

**Competing Interests:** The authors declare that they have no competing interests.

**Acknowledgement:** The authors would also like to acknowledge Mahaman Lahabou for his contribution to this study.

**REFERENCES**

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In Action control (pp. 11-39). Berlin, Heidelberg: Springer.

Ajzen, I. (1988). *Attitudes, personality and behavior*. Chicago: Dorsey.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, N.J: Prentice Hall.

Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of Applied Social Psychology*, 32(4), 665-688. Available at: https://doi.org/10.1111/j.1559-1816.2002.tb00236.x.

Ashraf, S. I. (2014). Campus radio against conflict: The case study in the university of Peshawar. *Journal of Islamic Communication*, 4(2), 177-197.

Fauteux, B. (2015). Campus frequencies:’Alternativeness’ and Canadian campus radio. *Interactions: Studies in Communication & Culture, 6*(1), 29-46. Available at: https://doi.org/10.1386/iscc.6.1.29_1.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An Introduction to theory and research*. Reading, MA: Addison-Wesley.

Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press.

Kim, S., Lee, J., & Yoon, D. (2015). Norms in social media: The application of theory of reasoned action and personal norms in predicting interactions with Facebook page like ads. *Communication Research Reports, 32*(4), 322-331. Available at: https://doi.org/10.1080/08824096.2015.1089851.

Lahabou, M. (2011). *Human science students’ acceptance of IIUM.FM: A test of the technology acceptance model*. Unpublished Master Thesis at the International Islamic University Malaysia (IIUM).

MCMC. (2007). Guideline on the provision of FM campus radio service (Mcmc/G/07/07 – Campus Radio). Retrieved from https://www.mcmc.gov.my/skmimgovmy/files/attachments/MCMC_G_07_07.pdf.

Mishra, D., Akman, I., & Mishra, A. (2014). Theory of reasoned action application for green information technology acceptance. *Computers in Human Behavior, 36*, 29-40. Available at: https://doi.org/10.1016/j.chb.2014.03.030.

Mohamed, S., Wok, S., & Lahabou, M. (2017). Technological development and its impact on student reception of a campus radio. *Journal of Education and Learning, 7*(1), 103-115.

Mohamed., S., & Azzman, T. S. A. T. M. (2018). The islamization of the Malaysian media: A complex interaction of religion, class and commercialization. *Intellectual Discourse, 26*(2), 655-658.

Montano, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. *Health Behavior: Theory, Research and Practice, 70*(4), 231.

Park, J. H. (2007). *Factors influencing the adoption of open access publishing*. Unpublished Doctoral Dissertation. Graduate School, Syracuse University.
Pookulangara, S., Parr, J., Tanoff, L., & Nix, K. (2017). Insta-shopping: Examining use of Instagram for shopping online using theory of reasoned action. Retrieved from https://lib.dr.iastate.edu/itaa_proceedings/2017/posters/77/.

Serwornoo, M. Y. W. (2017). The dilemma of building campus radio stations on a business model: The case of ATL FM in Ghana. *Journal of Media Business Studies, 14*(1), 60-78. Available at: https://doi.org/10.1080/16522354.2017.1302708.

Wilson, D. D. (2015). The learning curve: Distinctive opportunities and challenges posed by university-based community radio stations. *Interactions: Studies in Communication & Culture, 6*(1), 87-105. Available at: https://doi.org/10.1386/iscc.6.1.87_1.

Wok, S., & Mohamed, S. (2017). Internet and social media in Malaysia: Development, challenges and potentials. In B. P. Acuna, The evolution of media communication (pp. 45-64). Croatia: InTech.

Wucheng, Y., Ling, C., Qingdao, S., & Fan, L. (2016). Exploration of new methods of ideological and political education for college students: Integration of new media and construction of micro-environment. Paper presented at the The Fifth International Conference on E-Learning and E-Technologies in Education (ICEEE2016).

Young, C., & McComas, K. (2016). Media’s role in enhancing sustainable development in Zambia. *Mass Communication and Society, 19*(5), 626-649. Available at: https://doi.org/10.1080/15205436.2016.1201688.