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# INFORMATION SOURCE, INFORMATION CHANNELS AND INFORMATION CHOICE: THE MEDIATING EFFECT OF PERSONAL CHARACTERISTICS

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ABSTRACT. Although a strong relationship has been established between information source, information channels and information choice strategies, however, a mediator is required to further explain why or how the independent variables (information source and information channels) predict the dependents variable (information choice strategy). As a result, the collected data from 358 respondents of Arab tourists in Malaysia was analyzed through the regression analysis. Overall, the findings show significant relationships between information source, information channels and information choice. The result further shows that personal characteristic significantly mediate the relationship between information source, information channels and information choice. Hence, the study concludes that personal characteristic significantly explains the relationship between information source, information channels and information choice. Based on the findings obtained in this study, implications for the study and future research including the limitations are discussed.

**Keywords**: Information Source, Information Channels, Information Choice, Personal Characteristics

#### INTRODUCTION

The Tourism has become one of the major aspects of the economic sector that is generating a huge income and revenue to both individual and government of many countries where tourism is well promoted (Mat, Zakaria, & Jusoff, 2009). Until 9/11 incident, many Arab tourists tend to go for tourism adventure or vacation in the Western world which include the U.S.A and Europe. However, the incident of 9/11 has changed the baton where many Arabs now turn to the Asia countries particularly Malaysia for their tourism pleasure or adventure (Mat, et al., 2009). The data provided by Mat, et al., (2009) indicate that Arab tourists are the highest spenders among all other tourists in Malaysia. For instance, an average Arab is found to spend a minimum of RM5, 000.00 per trip.

Although, previous empirical studies (Grønflaten, 2008; 2009) in this domain have established significant relationship between information source, information channels and information choice strategies. However, there is a need to further investigate how and why these variables predict the information strategies (Grønflaten, 2009). This is in line with the argument presented by Bennett (2000) who argued that where there is a strong significant relationship between an independent and dependent variables, a mediator is required to explain the significant relationship between the independent and dependent variables. Therefore, towing the line of this argument, the present study introduces a mediator, personal

characteristic in order to further explain the relationship between information source, information channels and information choice strategies.

Besides, the studies conducted by Grønflaten (2008, 2009) have noted that personal characteristics which include education, gender, age etc.). Would significantly influence the association between the information search strategy (which comprises of information source and information channels and information choice). He further noted that these factors would play significant roles in explaining the relationship between information source, information channels and information choice strategies. Hence, the introduction of personal characteristic in particular education as a mediator in the relationship between information source, information channels and information choice strategies is justified. In the light of this argument, the present study investigates the mediating effect of personal characteristic in particular education on the relationship between information source, information channels and information choice strategies.

## LITERATURE REVIEW INFORMATION SOURCES, INFORMATION CHANNELS AND INFORMATION CHOICE STRATEGY

Numbering Within the context of this study, information source is described as the origin of the information about the tourism destination of the tourists or pleasure travelers (Abd Aziz & Ariffin, 2009), and these sources may include friend/relatives, media, internet and travel agents (Fodness & Murray, 1997). Besides this, Fodness and Murray (1997) noted that information sources can also be internal or external depending on where the information seeker obtained his information.

As for information channels, it is described by Rogers (1986) as the means by which messages (tourism information) get from one individual (tourism information provider) to another (tourist seeking tourism information). According to Rogers(1986), the information channel would include mass media channels such as radio, television, newspapers etc. Accordingly, information choice strategy on the other hand is concerned with the decision about the tourism destination of the tourists. It includes tourists choosing among alternative tourism destinations available to him.

Empirical findings by previous studies such as (Grønflaten, 2008; 2009) and Jansen and Rieh (2010) have acknowledged that travelers' choice of information is affected or determined by a number of factors such as information source and information channels. For instance, a qualitative study conducted by Grønflaten (2008) on factors that affect traveler's choice of information revealed that information source and information channels are among the identified factors. Thus, information source and information channels are good determinants of information choice of the travelers. This is also in line with the Media Richness theory which emphasizes on the richness of the information source and information channels to transmit or share information between people (Tan & Arnott, 1999). Also, another study by Grønflaten(2009) on information channels and travelers choice of information found in that information sources such as travel agents and service providers; and information channels such as face-to-face and the internet significantly affect travelers' choice of information.

However, previous studies have failed to distinguish between the source that is providing the information and the channel through which it is communicated. For instance, the study conducted by Jansen and Rieh (2010) noted that until now authors have failed to distinguish between information sources and channels, and these are among the most important theoretical construct of the information sciences. Accordingly, studies by Case(2012); Fodness & Murray (1997); Gitelson & Crompton (1983); Raitz & Dakhil (1989) further

revealed the inability of the previous studies to clearly differentiate between information sources and information channels. Researchers tend to use the term information source' whether they are referring to the provider of the information or the communication method (Case, 2012; Fodness & Murray, 1997; Gitelson & Crompton, 1983; Raitz & Dakhil, 1989).

Furthermore, Grønflaten(2009) has identified the problem with the communication method (otherwise known as information channel) used by the tourists. He argued that until now the tourists are yet to clearly show how they obtained their tourism information and how the information is being distributed. He noted that this is a huge misconception which needed to be addressed by the researchers. It is also noted that tourists particularly the Arab tourists are yet to clearly differentiate between the various methods or channels they used in sourcing for tourism information. For instance, the tourists have the problem of differentiating between travel agents and primary source providers or between face-to-face communication and internet channel of information. Grønflaten(2009) noted that a clear understanding between travel agents and primary source providers or between face-to-face communication and internet channel of information would help us to understand the Arab tourism search behavior. Based on this description, the information theory becomes very relevant to underpin this study as it stresses on the need for better sources of information and channels of information. It posits that individual in this case, the Arab tourists will obtain better information if their information search is based on right sources and channels of information.

#### PERSONAL CHARACTERISTICS

Secondary, Apart from other factor such as situational characteristic that have been identified to influence information source, information channels and information choice, personal characteristics such as age, education, nationality etc. have equally been acknowledged to have influence on information source, information channels and information choice. For instance, Fodness & Murray (1999), in attempt to identify the factors that influence the relationship between influence on information source, information channel and information choice categorized them into two major groups called situational characteristic and personal characteristics (e.g. age, education, nationality, gender etc.). The studies by (Grønflaten, 2008; 2009) on the influence of information search (comprising of information source and information channels) on information choice revealed that both situational characteristic and personal characteristics would influence the relationship between information source, information channels and information choice. However, this study concentrates only on the personal characteristic in particular education. The argument present by (Grønflaten, 2008; 2009) implies that personal characteristic such as education would influence or mediate in the information source, information channels and information choice relationship. Therefore, it is argued here that the higher the level of education of the traveler or potential tourist, the better the information source and information channels which will then reflect on the information choice. Hence, personal characteristic such as education is assumed to be a significant mediator in the information source, information channels and information choice relationship. It is expected to give further explanation on the influence of information source and information channel on information choice. By so doing, the tourism travelers to obtain better information source, information channels and information choice. Other personal characteristics that have been identified by previous studies that play mediating roles in the information source, information channels and information choice relationship include age, gender, education, socio-economic status and nationality, as well as personal values (Gitelson & Crompton, 1983; Grønflaten, 2008; Grønflaten, 2009; Gursoy & Chen, 2000; Luo & Cai, 2004; Raitz & Dakhil, 1989). Based on the literature review as well as the conceptual framework in figure 1, the following hypotheses are formulated:

H1: there is significant relationship between information source and information choice.

H2: there is a significant relationship between information channels and information choice.

H3: personal characteristic will mediate in the relationship between information source and information choice.

H4: personal characteristic will mediate in the relationship between information channels and information choice.

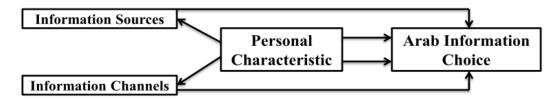


Figure 1. Conceptual framework

#### RESEARCH METHODOLOGY

#### Research design

While this study acknowledged that there are several other research approaches exist, the study opts for a quantitative research approach. It is concerned with a quantitative data and then applies statistical analysis in the analysis of the data being collected (Saidu, 2006). Amin & Khan (2009) and Khurshid (2008) affirmed that quantitative questionnaire approach is suitable in conducting a research in social science research.

#### POPULATION, SAMPLING AND UNIT ANALYSIS

The population of this study includes all the Arab Tourists coming to Malaysia. Currently, there are 200,000 Arab populations coming to Malaysia (Mat, et al., 2009). This study adopts a convenient sampling approach of non-probability sampling technique. This sampling technique gives the researcher the opportunity to obtain participants or units that are most conveniently available for the study (Zikmund, Babin, & Dan Griffin, 2013). One major reason for choosing convenience sampling technique for this study is the lack of a proper sampling frame (Abzakh, Ling, & Alkilani, 2013). The sample size for this study is 385 after the treatment of outliers and normality. Furthermore, the unit of the analysis is individual level. It includes all the individual Arab tourists coming to Malaysia. It is better to utilize them as they are the ones involved in tourism pleasure or adventure. Thus, utilizing them gave a better understanding of the issue under investigation. Indeed, they were the most suitable persons to provide information on the variables under investigation. Besides, past studies by Raitz & Dakhil (1989) and Grønflaten (2009) on tourism and pleasure tourists, used individuals such as the tourists and visitors to gathered information in a study of this nature. The variable measurement, all constructs in this study were measured using a five-point likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) based on the previous work by Sekaran (2001). For the information source, it was measured using the following dimensions; travel agents, service providers, information center, journalists/ writers, other travelers, and friends/ family adapted from the work of Grønflaten (2005). Concerning the information channels variable, it was measured using five dimensions consisting of face-to-face, telephone, TV, print, and the Internet and it were adapted from the work of Grønflaten (2005). Also, personal characteristic was equally measured using the items adapted from Grønflaten (2005) and Grønflaten (2009). Lastly, the information choice was measured by adapting from the work of Grønflaten (2005).

#### DATA COLLECTION PROCEDURE

This study adopts a well-structured questionnaire approach to gathered information from the respondents (Sekaran, 2006). Thus, this study employed self-administered procedure also called drop-off and pick procedure to distribute the questionnaire to the respondents for this study (Sekaran, 2006). The questionnaires were distributed by the researcher through drop-off and pick procedure

#### ANALYSIS AND RESULT

#### Descriptive analysis result

The demographic information about the gender, nationality, education, and income of the respondents who participated in the study. That slightly half of the respondents are male (53.9%), while the remaining half is female (46.1%). For the education, the result shows that majority of them have degrees (35.8%), high school (23.5%), diploma (23.7%), masters (15.6%) and others (1.4%). Similarly, the result shows that majority of them are in the income bracket of less than RM20, 000, 35.5 percent earn income above RM50, 000 and 29.1%t of them earn income between RM41, 000 and RM50, 000 and the remaining earn between RM21,000 and RM30,000 (14%), and RM31,000 and RM40,000 (17.6%) respectively. For nationality, the result indicates that majority are from Saudi Arabia (31.8%), UAE (15.6%), Bahrain and Qatar (11.2%) respectively, Oman (10.6%), Iraq (6.7%), Kuwait (5.6%), and Jordan (2.2%) while other nationalities are just slightly greater than 1%.

## THE MEAN, STANDARD DEVIATION, CORRELATION AND RELIABILITY RESULTS

Table 1 presents the mean, standard deviation, correlation and the reliability result of the variables utilized in this study. The correlation result shows that the independent variables including the mediating variable (personal characteristic) are all positively and significantly correlated with the dependent variable (information choice). The result also shows that the instruments are reliable with Cronbach Alpha coefficient scores of .62 for information source, .69 for information channels, .78 for personal characteristic and .63 for information choice. Cronbach Alpha is the indicator of whether an item is reliable is or not. Besides, a Cronbach Alpha of 0.5 above is considered acceptable for an item to be considered reliable. Therefore, the Cronbach Alpha result displayed in table 1 indicates that all items measured what they intend to measure.

Table 1. Mean standard deviation, correlation and Cronbach's alpha result

Variables	Mean	SD	1	2	3	4	Cronbach Alpha
Information source	4.49	.24	1				.62
Information channels	4.35	.39	.344**	1			.69
Personal characteristics	4.04	.58	.452**	.288**	1		.78
Information choice	4.24	.34	.347**	.411**	.459**	1	.63

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

#### REGRESSION ANALYSIS AND RESULTS

#### Test result for the direct effect

The simple linear regression was used to determine the direct effect of both information source and information channels on the information choice. The result presented in table 2

showed that both information source and information channels are statistically significant at p<0.000.

Table 2. Summary of Regression result for information source and information channels variables

Variables	R2	Adjusted R2	Beta	T	Sig.
Information source	.120	.118	.35	6.9	.000***
Information channel	.169	.166	.41	8.5	.000***

<sup>\*\*</sup>p<0.05, \*\*\*p<0.001, Sig =Significant, NS = Not Significant

#### TEST RESULT FOR THE INDIRECT EFFECT

The multiple regression analysis was used to test for the indirect effect of personal characteristic (education) on the information source, information channels on the information choice using the method suggested by Baron & Kenny (1986). The results are presented in Table 3 and 4. The results in table 3 and 4 show that personal characteristic significantly mediate the relationship between information source, information channels and information choice. It was significant at p < 0.000 in both results. The beta scores as indicated in both Table 2, 3 and 4 showed that there was decrease in the betas from .35 to .18 for information source while a decrease from .41 to .30 for information channels. Therefore, partial mediation has taken place.

Table 3. Regression result of mediating effect of personal characteristics on information source and information choice

Variables	R2	Adjusted R2	Beta	t	Sig.
Information source	.235	.231	.175	3.361	.001***
Personal characteristic			.380	7.305	.000***

<sup>\*\*</sup>p<0.05, \*\*\*p<0.001, Sig =Significant, NS = Not Significant

Table 4. Regression result of the mediating effect of personal characteristics on information channels and information choice

Variables	R2	Adjusted R2	Beta	t	Sig.
Information Channels	.295	.292	.304	6.532	.000***
Personal Characteristics			.372	7.989	.000***

<sup>\*\*</sup>p<0.05, \*\*\*p<0.001, Sig =Significant, NS = Not Significant

#### **DISCUSSION**

As indicated in the title of this study, the study examined the mediating effect of personal characteristic on information source, information channels and information choice. As such, questionnaire was collected from 385 respondents and the data was then analyzed using the regression analysis technique in order to test for the four major hypotheses hypothesized in this study (1) there is significant relationship between information source and information choice; (2) there is a significant relationship between information channels and information choice; (3) personal characteristic will mediate in the relationship between information source and information choice, and (4) personal characteristic will mediate in the relationship between information source and information choice. The results showed significant relationships. The results for direct effects of both information source and information channels indicate significant relationship with the information choice. Similar positive relationship between information source, information channels and information choice was

also found by Grønflaten(2009). Thus, the results are consistent with previous studies by Grønflaten(2009) who found that information search strategies which comprise of information source and information channels affect traveler information choice. The findings suggest that both information source and information channels determine the level of information choice of the tourism travelers. Thus, they are significant predictors of information choice.

Furthermore, the empirical result for the indirect effect revealed that personal characteristic mediates the influence of information source and information choice, and the influence of information channels on information choice. These findings are consistent with Grønflaten (2008) who found that apart from other factors such as information source and information channels that affect information choice personal factors such as education also influences travelers' choice of information. Also, the findings support the previous finding by Grønflaten (2009) who also found that personal characteristics which include education significant influence the association between the travelers' information source, information channels and information choice. The findings suggest that the higher the educational status of the traveler or tourist the better the relationship between information source and information choice, and the channels of obtaining the information. Thus, a tourist would obtain a better information source and information channels if he or she is well educated and this would reflect in the information choice. The result further suggest that lack of personal characteristic such as education on the side of the tourist or traveler would affect the quality of information source and information channels which will also affect the information choice.

#### LIMITATIONS AND FUTURE RESEARCH

Just like any other research, this particular study is not exempted from limitations. However, its limitations are in two folds: First, the data utilized in this study only reflect the Arab tourists or pleasure travelers coming to Malaysia. Others tourists from other countries or continents are not accounted for. Thus, a larger more diversified sample from different economic and cultural regions could enhance the generalization of findings of this study. Secondly, the study only considered the personal characteristic in particular education as a mediator; other personal characteristics such as age, gender, nationality and personal values would also play significant mediating roles in the relationship between information source, information channels and information source. Hence, future research should consider using them as mediators in any future study of this nature. Besides, it is hoped that future studies in this domain should try to replicate this study in other research settings and destinations so as to validate the results obtained.

#### **CONCLUSION**

The findings obtained in this study have contributed to the understanding of the relationship between information source, information channels and information choice with the mediating role of personal characteristic in particular education. Therefore, based on the results from the regression analyses, the study concludes that both information source and information channels are indispensable factors for travelers information choice, as they significantly showed that predict information choice. Furthermore, personal characteristic such as education plays a significant role between information source, information channels and information choice of the travelers. Thus, personal characteristic in particular education is a significant mediator in the relationship between information source, information channels and information choice. Therefore, pleasure travelers or tourists in particular Arab tourists coming to Malaysia should urgently give considerable attention to these factors in order to ensure a successful tourism experience in Malaysia.

#### **REFERENCES**

- Abd Aziz, N., & Ariffin, A. A. (2009). Identifying the relationship between travel motivation and lifestyles among Malaysian pleasure tourists and its marketing implications. *International Journal of Marketing Studies*, 1(2), P96.
- Abzakh, A. A., Ling, K. C., & Alkilani, K. (2013). The Impact of Perceived Risks on the Consumer Resistance towards Generic Drugs in the Malaysia Pharmaceutical Industry. *International Journal of Business and Management*, 8(3), p42.
- Amin, H. U., & Khan, A. R. (2009). Acquiring Knowledge for Evaluation of Teachers Performance in Higher Education using a Questionnaire. arXiv preprint arXiv:0906.4663.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173-1182.
- Bennett, J. A. (2000). Focus on research methods-mediator and moderator variables in nursing research: conceptual and statistical differences. *Research in nursing and health*, 23(5), 415.
- Case, D. O. (2012). Looking for information: A survey of research on information seeking, needs, and behavior. Emerald Group Pub Limited.
- Fodness, D., & Murray, B. (1997). Tourist information search. *Annals of Tourism Research*, 24(3), 503-523.
- Fodness, D., & Murray, B. (1999). A model of tourist information search behavior. *Journal of Travel Research*, 37(3), 220.
- Grønflaten, Ø. (2005). Sources and Channels of Tourism Information An Exploratory Study of Travellers' Choice of Information Search Strategies. Griffith University.
- Grønflaten, Ø. (2009). The Tourist Information Matrix–Differentiating Between Sources and Channels in the Assessment of Travellers' Information Search. *Scandinavian Journal of Hospitality and Tourism*, 9(1), 39-64.
- Jansen, B. J., & Rieh, S. Y. (2010). The seventeen theoretical constructs of information searching and information retrieval. *Journal of the American Society for Information Science and Technology*, 61(8), 1517-1534.
- Khurshid, K. (2008). A Study of the Relationship between the Professional Qualifications of the Teachers and Academic Performance of Their Students at Secondary School Level. *Paper presented at the Proceedings of World Academy of Science, Engineering and Technology*.
- Mat, A. B. C., Zakaria, H. A. B., & Jusoff, K. (2009). The Importance of Arabic Language in Malaysian Tourism Industry: Trends during 1999-2004. *Canadian Social Science*, 5(4), 12-17.
- Raitz, K., & Dakhil, M. (1989). A note about information sources for preferred recreational environments. *Journal of Travel Research*, 27(4), 45-49.
- Rogers, E. M. (1986). Communication technology (Vol. 1): Free Press.
- Sekaran, U. (2006). Research methods for business. John Wiley & Sons.
- Sekaran, U., Robert, Y., & Brain, L. (2001). *Applied business research: Australia*. John Wiley and Sons Australian Ltd.
- Tan, W. D., & Arnott, D. R. (1999). Managerial information acquisition and the World Wide Web: A theoretical background.