



## Information Sources and Investment Decision among Malaysian Investors: Clarifying the Role of Gender and Product Knowledge.

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**Abstract.** This study explore the moderation effect of gender and product knowledge (PK) on the relationship between information sources (IS) and Islamic unit trust investment decision (IUTID). Muslim investors in Malaysia was chosen as the respondents for this study. The relationship between the variable was tested using Partial Least Square Structural Equation Modelling (PLS-SEM). Our results show that both variables, gender and product knowledge moderate the relationship between information sources and Islamic unit trust investment decision. The result indicate that information sources strongly influence Islamic unit trust investment decision when the Muslim investors have low product knowledge. In addition, the finding also reveal that information sources strongly influence Islamic unit trust investment decision more for female investors than male investors.

**Keywords:** Investment Decision Making, Islamic Unit Trust, Information Sources, Gender, Product Knowledge

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### INTRODUCTION

Information sources is one of the important component in decision making process among consumers. Under behavioral finance, information sources is one factor which can effect investor psychology and emotions. This factor will cause investors to behave in irrational ways (Bennet, Selvam, Ebenezer, Karpagam, & Vanitha, 2011; Hossain & Nasrin, 2012). Blackwell, Miniard, and Engel, (2001) has developed Engel, Blackwell & Miniard (EBM) decision making model and explain that information sources is one of the essence towards individual decision making process. Consumers will search more information to increase their knowledge or understanding on certain product before they make any purchase decision.

According to Kumar and Abdulla (2020), due to increasing the cost of living, it is important for consumers to save their saving in the right place. Sources of information is important to helps increasing consumers knowledge related with saving and investment products and later make a right decision. One available investment alternative which is appropriate for all level of consumers is Islamic unit trust. This product provide unique features such as professional management, diversification, liquidity, and less risk compare to equity investment. The most important, this product is suitable for the Muslim consumers as it is inline with Shariah based. From the broad information provided in many sources, the consumers can create their awareness on the important of saving in unit trust fund rather than only save in saving account.

In addition, individual investors tend to rely information sources in their decision making process (Capon et al., 1996; Satti, Ud Din & Ali, 2013). Mayoral and Vallelado (2012) state that information sources are significant in decision making as it can increase investor's knowledge. Basically the information are comes from professional advisors, family members, friend, internet sources, radio, television, banners, and pamphlet. According to Hyun Shin, Tae Kim and Seay (2020), mostly U.S. households make a saving and investment decision based on the information from financial planners, brokers, and sources from the internet.

Information sources has been widely explore in purchase decision (Abdul Jamal, Ramlan, Pazim, & Budin, 2014; Capon, Fitzsimons, & Price, 1996; Chao & Rajendran, 1993; Lai, Low, & Lai, 2001). However, there are still limited study which explore the moderation effect of gender and product knowledge on the relationship between information sources and investment decision making. Hence, this study will

examine the moderation effect of gender and product knowledge (PK) on the relationship between information sources (IS) and Islamic unit trust investment decision (IUTID) in Malaysia.

## LITERATURE REVIEW

### Investor's Decision Making

Decision making is the process which can reducing uncertainty and understand all the alternatives which can allow consumer to made a reasonable choice (Harris, 2012). Right decision is very important to all people's life in choosing the best products or services. Basically all the decision are made in line with their aims, goals, objectives, desires and values. There are many alternative choices need to be considered, and it is important to the decision maker to make a choice which has the maximum possibility of success or effectiveness (Harris, 2012). Consumers' decision also includes the product selection from the set of possibilities. Selection can be done based on directly compare products or selection a product based on memory (Stávková, Stejskal, & Toufarová, 2008).

All the decision made by the investors is subjective. Mostly their decision are related with the expected cost that they can covered, and their knowledge in investment (Virlics, 2013). According to Bettman and Park (1980), people make a choice because they usually have enough product information available in the society and have past experience with the products. People who have some knowledge about the product will react difference with those who did not have any knowledge about the product. The unacknowledged consumers will spend more time to evaluate the product until they believe that product will give benefit for them.

### Information Sources (IS)

Information plays a crucial role in assisting investors in managing their financial decisions (Abdul Jamal et al., 2014). Before make any purchase decision, investors will search more information (Chao & Rajendran, 1993). Consumers need more knowledge before making any purchase decision which will eventually motivate them to search more information.

Most of the investors depends strongly on internal and external information before make any stock decision (Lai et al., 2001). Capon et al., (1996) found that investors may influence by two types of information namely interpersonal such as family and friends and impersonal (mass) communications such as advertising. Study by Hyun Shin, Tae Kim and Seay (2020) shows that financial planners, brokers, and the internet as the main sources of information used by the individual investors in making decisions on saving and investment. From that information, the investors know how to diversified their investment portfolios.

Previous study on the purchase decision process conducted by Capon, Fitzsimons, and Price (1996) found that most of the investors are influenced by published performance ranking in the unit trust fund purchase decision, followed by advertising and seminars. Moreover, another research by Alexander, Jones, and Nigro (1998) revealed that majority of the investors in their study choose unit trust fund prospectus and brokers also influence the investors in purchasing unit trust fund.

Internet is a popular online search tool because it allows an easy, quick, and efficient access to information (Peterson & Merino, 2003). Internet allows consumers to obtain information through internet-forum information. A study by Fares and Khamis (2011) shows that the use of internet is positively significant with individual investor's in stock market behaviour. According to Bickart and Schindler (2001) online forum is more effective in generating product interest to the consumers compared to corporate website. The reason is that consumers can gain more product knowledge from the discussion through online forum.

Joo and Grable (2000) examined the influence of family environment and work environment in retirement investment decision and saving programs. This study reveals that the information from the employer or company is important which can increase the decision of the workers on retirement investment. Finally, Muhammad and Abdullah (2009) investigated the investment decision making style among individual investors who traded their shares in stock broking companies in KlangValey, Malaysia. The results found that economy analysis and frame of reference significantly influence investment decision making style. This indicates that emotions do not affect their decision making.

To be summarize, it can be concluded that each investor is influenced by different sources of information in their investment decision making. Hence, this situation has motivated the present study to investigate which IS will influence Muslim investors in Malaysia in their IUTID. In this study, the elements inside IS are further categorised as recommendations by friends or/and family, unit trust consultants, internet resources, advertisement, television, seminars, books, poster, catalogues, master prospectus, and published performance ratings.

## **Hypothesis 1: IS has a positive impact on IUTID.**

### **Gender**

Gender is one of the element in demographic factors which show the individual as male or female, especially in the social and cultural differences. Most of the previous studies on investment decision making were interested to investigate the effect of gender on investment decision making (Bajtelmsmit & Bernasek, 1996; J. Grable & Lytton, 1999; Barber & Odean, 2001; Agnew, 2006; Lizárraga et al., 2007; Lusardi & Mitchell, 2008; Fares & Khamis, 2011; Geetha & Ramesh, 2012; Hossain & Nasrin, 2012; Dhar & Ghosh, 2014; Haq & Malik, 2014; Sadiq & Ishaq, 2014; Rizvi & Fatima, 2015; Tanyolac & Karan, 2015; Begum & Rahman, 2016). Limited studies tested the moderation effects of gender in investment decision making area.

Previous studies by Agnew (2006); Hossain and Nasrin(2012); and Rizvi and Fatima (2015) found that gender is significantly related with investment decision making. The finding by Rizvi and Fatima (2015) reveal that men are more interest to make an investment rather than female. Male investors also more likely to own a higher percentage of company stock (Agnew, 2006). Previous study also show that majority of the female investors are risk averse (Nelson, 2015; Powell & Ansic, 1997; and Rizvi & Fatima, 2015). This is based on the belief that men are overconfident in investment decision compared to female investors (Barber & Odean, 2001). A survey by Lizárraga et al. (2007) found that women are more obsessed with uncertainty, doubts, and dynamism in their decision making. They are worried about the consequences that may derive from the decision. From this results, it shows that women need more information about the product before their purchase decision.

## **Hypothesis 2: Gender moderates the relationship between IS and IUTID.**

### **Product Knowledge (PK)**

Product knowledge is related with the total amount of information store in memory that is relevant to product purchase and consumption (Blackwell, Miniard, & Engel, 2001a). Product knowledge has been acknowledged as a characteristics in consumer research that effects all stages in the decision making process (Bettman & Park, 1980). Product knowledge plays an essential part in the research of consumer behaviour (Lin & Chen, 2006; Raju, Lonial, & Mangold, 1995) and it is an important element when purchasing (Lin & Chen, 2006). The decision making of consumers was influence by the level of product knowledge. Those who have high product knowledge are more competent in making a right decision and give them opportunities to choose the great product.

Previously, product knowledge have been tested as moderating variable in many established studies. Unfortunately, there are still limited study tested the moderating effect of product knowledge in the investment decision making area. Bei and Widdows (1999) tested the effects of information on purchase decision with the moderation by product knowledge. This research found that highly knowledgeable consumer and the novice will interpret information in different ways. The novices' consumer difficult to interprate complicated information provided and they think that simple information is not enough to help make a right decision. Whereas, knowledgeable consumers can easily differentiate between simple and complex information. Mostly, those who are experts about the product will ignore the simple information and make their purchase decision based on their product knowledge stored in their mindset.

## **Hypothesis 3: PK moderates the relationship between IS and IUTID.**

## **METHODOLOGY**

This research uses a quantitative method via questionnaire. This study design a set of questionnaire's item based on adaptation from prior studies. The questionnaire consists of demographic profile of the respondents, 10 items of selection criteria on Islamic unit trust investment (Capon et al., 1996; Jamaludin, Smith, & Gerrans, 2013; Ramasamy & Matthew C. H. Yeung, 2003), 11 items of information sources (Capon et al., 1996), and 7 items of product knowledge (Wan Nawang, Hashim, & Marzuki, 2008). All the items using a Likert scale (1-5 ratings).

The respondents were collected based on purposive sampling method, where they are collected based on some criteria as Muslim investors, have an experience on investment in Islamic unit trust funds, and at the age 18 and above. Overall, this study successfully collected 836 questionnaires however, only 787 data can be used for the analysis. The data has been analyzed using Partial Least Square Structural Equation Modelling (PLS-SEM).

## FINDINGS

### The Results of Information Sources and Islamic Unit Trust Investment Decision

From the analysis of the measurement model assessment, the results of composite reliability (CR), average variance extracted (AVE) and Cronbach's Alpha for all the variables as in Table 1 are achieved the requirement as suggested by Joseph F. Hair et al. (2017). The total of AVE for all the variables are exceed than 0.5 and both CR and Cronbach's Alpha are greater than 0.7. In addition, the  $R^2$  for IUTID is 0.334, which indicates that IS explains 33 percent of the variance in IUTID.

The relationship between IS and IUTID is positively correlated ( $B=0.578$ ). To assess the direct significant relationship between IS and IUTID (Hypothesis 1) can be derived from the bootstrapping with 5000 sub-samples. The result from the analysis show that IS strongly significant with IUTID at  $p < 0.01$ . (see Table 2). Hypothesis 1 is supported.

**Table 1: Reliability and Validity Test**

	Cronbach's Alpha	CR	AVE	DISCRIMINAT VALIDITY
IUTID	0.859	0.89	0.503	YES
IS	0.869	0.897	0.522	YES
PK	0.844	0.882	0.517	YES
GENDER	1.000	1.000	1.000	YES

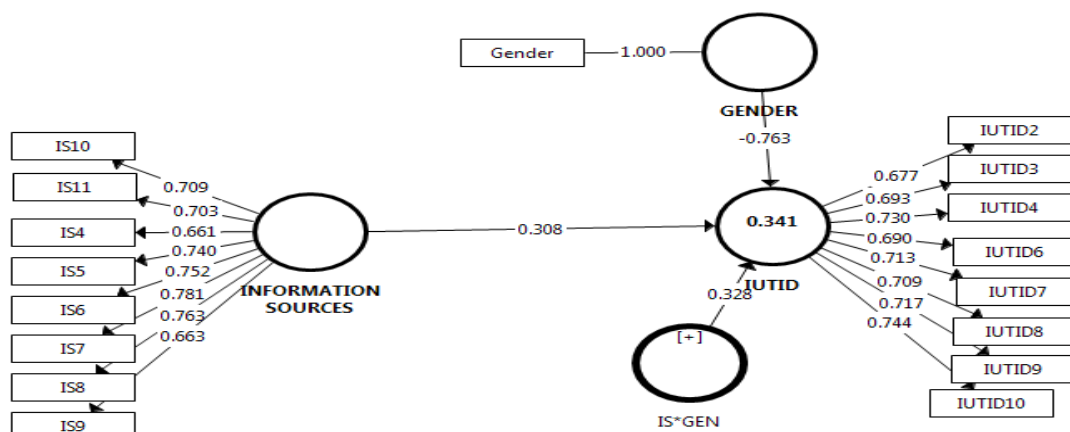
**Table 2: Hypothesis Testing**

	Original Sample (O)	Sample Mean (M)	Standard Error (SE)	T statistics	P Value
IS → IUTID	0.578	0.58	0.028	20.389***	0.000
GEN → IUTID	-0.763	-0.756	0.337	2.263**	0.012
IS*GEN → IUTID	0.328	0.325	0.141	2.319**	0.010
PK → IUTID	0.304	0.302	0.038	8.096***	0.000
IS*PK → IUTID	-0.18	-0.196	0.068	2.638***	0.004

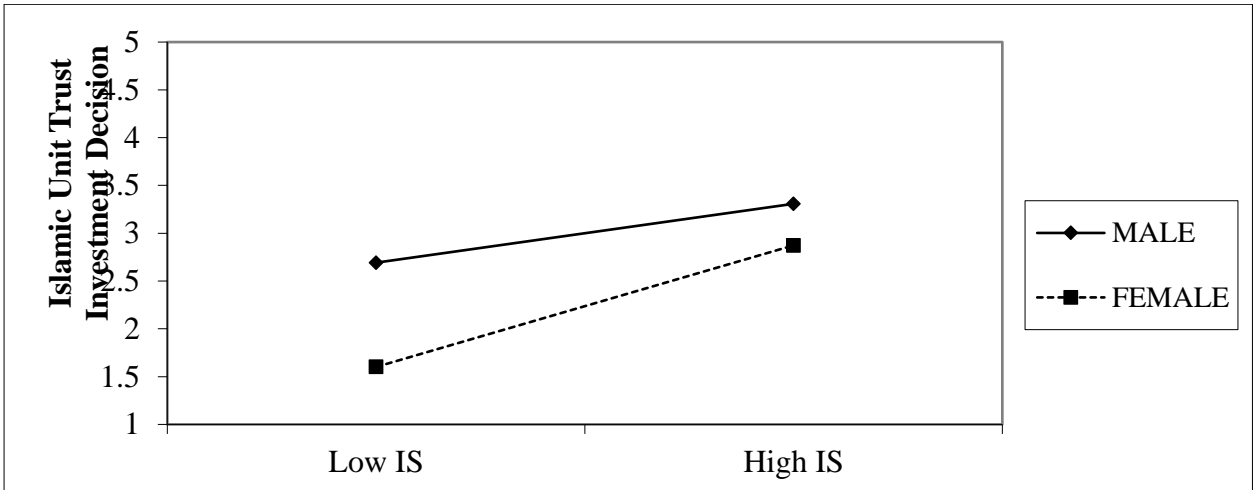
Note: \*\*\* Significant Level  $< 0.01$ , \*\* significant level  $< 0.05$

### Moderation by Gender on the Relationship between Information Sources and Islamic Unit Trust Investment Decision

Figure 1 shows that the significant relationship between gender and IUTID with the significant level at 5 percent ( $p = 0.012$ ). The model in Figure 1 also shows the significant relationship on the moderation effect of gender on the relationship between IS and IUTID at 1 percent significant level ( $p = 0.010$ ). This results indicate that gender moderates the relationship between IS and IUTID. Thus, the Hypothesis 2 is supported. The moderation effects can easily measure based on graph as in Figure 2. From the result in Figure 2, it can be explained that IS strongly influence IUTID more for female Muslim investors than male Muslim investors. The  $R^2$  for IUTID after moderation by gender is 0.341.



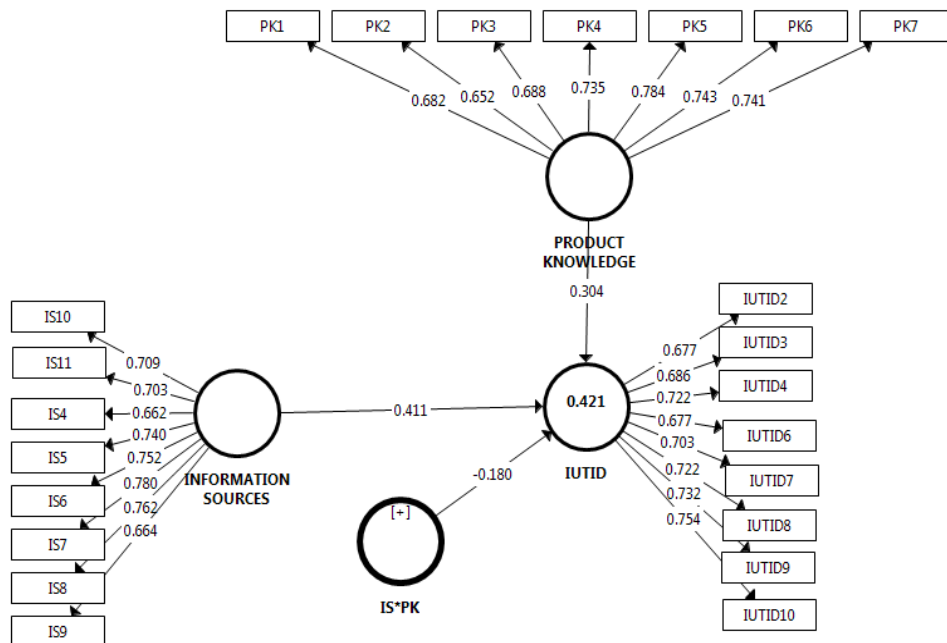
**Figure 1: Model with the moderation by Gender**



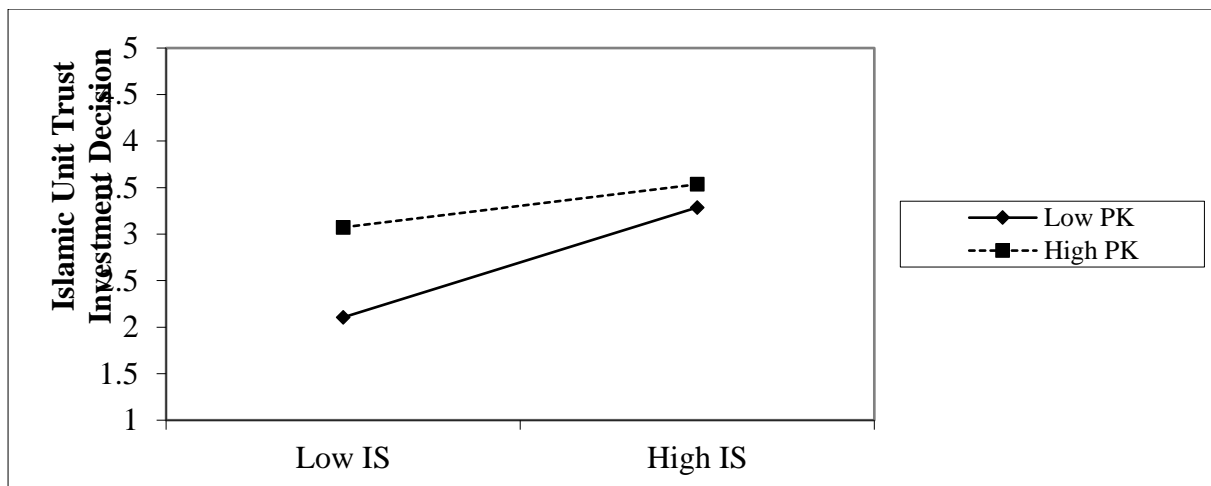
**Figure 2:** Moderation effect of Gender between IS and IUTID

**Moderation by Product Knowledge (PK) on the Relationship between Information Sources and Islamic Unit Trust Investment Decision**

The effect of product knowledge on the relationship between IS and IUTID (Hypothesis 3) can be tested using the same style as in Hypothesis 2. The results in Figure 3 shows the significant relationship between product knowledge and IUTID with the significant level of 1 percent ( $p=0.000$ ). The model also shows the moderation effect of product knowledge on the relationship between IS and IUTID with the significant level at 1 percent ( $p=0.004$ ). This indicate that PK as a moderating variable has a significant effect on the relationship between IS and IUTID. The  $R^2$  for IUTID after moderation by PK is 0.421. The result shows that IS strongly influence IUTID if Muslim investors have low PK. Muslim investors who have high product knowledge will ignore IS in their IUTID. (see Figure 4).



**Figure 3:** Model with the moderation by Product Knowledge



**Figure 4:** Moderation effect of PK between IS and IUTID

### CONCLUSION

This study investigates an unexplored moderation effects of gender and product knowledge between IS and IUTID. The results from this study shows that gender and product knowledge moderate the relationship between IS and IUTID with the different significant level. First, this study can proof that the moderation effect of product knowledge is more than the moderation effect of gender towards the relationship between IS and IUTID.

Second, the finding reveal that product knowledge moderates the relationship between IS and IUTID. Muslim investors with low product knowledge need information sources to help them in investment decision making. However, this situation different for the investors who have high product knowledge. Those who have high product knowledge will ignore information sources in their decision making process.

Third, the finding shows that IS strongly influence IUTID more for female investors than male investors. This results shows that in investment decision making, female investors need more IS to increase their confidence level to make an investment decision. This situation also supported the previous study by Nelson, (2015); Powell and Ansic, (1997); and Rizvi and Fatima, (2015) that majority of the female investors are risk averse. As risk averse investors, they depend more on information sources to increase their level of confident in justifying their investment decision.

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