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ROLE OF PRODUCT KNOWLEDGE AND PRODUCT INVOLVEMENT IN DETERMINING INVESTMENT INTENTIONS OF INDIVIDUAL INVESTORS IN PAKISTAN

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ABSTRACT

The review of related literature indicates that consumer behaviour constructs such as product knowledge and product involvement can be a potential factor that can help to determine the investment intentions of individual investors. Thus, current research employed a consumer behaviour perspective to determine the investment intentions of individual investors by collecting data from a sample of 548 individuals employed in various companies in Pakistan. The collected data was analysed using descriptive statistics with the help of SPSS. The reliability and validity of the focal constructs was assessed using measurement model and hypothesis testing was done through structural model. SmartPLS 3.3.2 was used as a tool to run measurement and structural model. The measurement model shows that focal constructs hold acceptable level of reliability and validity. The hypothesis testing results showed that there is a significant effect of product knowledge and product involvement on the investment intention of individual investors. The results contribute toward better understanding of investment intention of *investors from a consumer behaviour perspective (product knowledge, product involvement). The results can be helpful for the practitioners to develop some policies to increase the intentions of individual investors by creating awareness of financial products. Moreover, to design programs that can increase the level of involvement of individual investors in financial products. These efforts can enhance the investment intentions of individual investors.*

Keywords: product knowledge, product involvement, individual investors, investment intentions.

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1. INTRODUCTION

Investment decision is considered as a complex purchase decision because a wide variety of investment options are available for investors. These options have different risk and profiles, complexity levels, which investors tend to consider while making investment decisions (Kengatharan & Kengatharan, 2014). Moreover, the consequences of financial decisions remain as one of the most crucial factor that significantly influence during the investment decision making in a variety of ways (Duclos, Wan and Jiang (2013). In the financial decision making, earlier it was believed that investors are rational and they follow standardised measures in order to evaluate their investment decision. These standards include risk and return trade-off and possession of symmetric information available in market to all investors. In addition to that the available information could not be used to predict the stock prices and associated returns (Bakar & Yi,2016). All these assumptions portray investor as rational rather a human being, whereas in reality investors tend to behave by following rule of thumbs instead of optimization (Jain, Walia, & Gupta, 2019). Behavioural finance as a subject to include human perspectives in financial decision making argued that investors are not rational but they are human (Baker &Yi, 2016; Jain et al. 2019; Tversky & Kahneman, 1974). Moreover, the studies conducted in the area of behavioural finance highlighted various biases and behavioural patterns that contradict with standard finance as indicated in portfolio theory (Markowitz, 1952), capital asset pricing (Sharpe, 1964) and capital market efficiency (Fama, 1970).

As behavioural finance is emerging field, the knowledge generated in the field still face severe criticism. Dayaratne and Wijethunga (2015) argued that the validity of behavioural models is subject to serious criticism among the stakeholders of the capital markets. This induced the invention of new approaches that seek to identify the determinants of stock buying decisions. The recent evidence also revealed that irrational behaviour which is guided by the psychology of the investors is one of the major factor that affects investment decisions of individual investors. Hence, there is a dire need for academic researchers to establish the relationship between individual's behavioural characteristics and investment decisions (Dayaratne & Wijethunga, 2015). The behavioural finance field has established its basis and overcoming the criticism made by standard finance researcher. The established link between psychology and human being and linking with economics theories provide support to the established arguments in behavioural finance. The theories such as prospect theory (Kahneman & Tversky, 1979); theory of behavioural finance and behavioural portfolio theory (Shefrin & Statman, 1994) among others serves as base to challenge the assumptions of traditional theories. In addition to that researchers for instance De Bondt and Thaler (1985) published "Does the stock market overreact?", Tversky and Kahneman (1974) "Judgment under uncertainty: Heuristics and biases, Kahneman and Tversky (1979) "Prospect theory: An analysis of decision under risk" and Shefrin and Statman (1994) "Behavioral capital asset pricing theory" support behavioural finance. These researchers provide avenue for further development in the area of behavioural finance.

Further researchers include behavioural biases, emotions and personality traits of investors and evaluate their influence on investment decision. The advancement brings different aspects such as considering investors as a consumer (Aspara & Tikkanen, 2008; Aspara, 2013; Lim, Soutar & Lee, 2013; Ibrahim & Arshad, 2018). The economic psychology and behavioural finance includes investors' subjective perception and assess their influence on individual investors' decision to invest for example ***Aspara and Tikkanen (2008), Aspara (2013), Ibrahim and Arshad (2018). The inclusion of consumer related construct intend to provide more insight of decision to invest in a particular stock.***

The literature on consumer behaviour has been developed since the 1960s and today, there is an abundance of rich and in-depth information (Lim, Soutar & Lee, 2016). Nevertheless, very few studies have been conducted on investors' decisions making using consumer behaviour constructs, as used previously in various purchase intention's studies (e.g. Laroche, Nepomuceno & Richard, 2010; Aspara & Tikkanen, 2011; Lim, Soutar & Lee, 2013; Aspara, 2013). Considering the apparent evidence that investment decision-making is affected by investor's behaviour, Lim et al. (2016) addressed that there is a need to investigate the relationship between investor's behaviour and their financial decision-making in a perspective by treating investors as a consumer. It is a commonly raised issue and growing concern for practitioners and researchers that the consumers in the market are not well prepared to deal with the increasingly complex environment of financial investment related decisions Agarwal (2010). Agarwal (2010) further mentioned that it is necessary to study investors' financial behaviour from consumer behaviour perspective.

The individual level of behaviours can be explained psychologically in both consumer behaviour and finance research. The broader literature on consumer behaviour discovered that product knowledge and involvement of product have received considerably lesser attention by finance researchers regardless of its growing importance in investment decision making (Lim et al., 2013). According to Lin (2007), consumer's purchase decisions are significantly influenced by two factors; the surrounding external environment and their personal experiences. The purchase decisions are only made once consumers have successfully evaluate, compare and judge different alternative based on the available information.

The purchase intention of the consumer is also affected by the knowledge that they possess about the product. In general, higher product knowledge leads to better memory, logical abilities, recognition and analysis of the available information. Consequently, consumers who possess a higher level of product knowledge are more inclined to use their own evaluation when making a purchase decision instead of stereotype decision making. On the other hand, consumers who possess lesser product knowledge tend to use extrinsically stereotypical cues to make purchase decisions. Lin (2007) and Lim et al. (2016) conclude that product knowledge is the factor which influences consumers' purchase intentions and decisions.

Ali, Shafeeq and Ali (2012) reported that the significantly low proportion of investment in stock market is due to the lack of awareness, financial literacy, social interaction, entry and informational cost. Bashir and Nisar (2013) argued that the role of the stock market investment has been very crucial in recent year. Most individuals invest for the purpose of saving their money for future and retirement age, therefore investment decisions are importance in the lives of individuals. There are very few studies conducted on how consumer behaviour factor can effect on the investment intentions of individual investors. To fill in this gap, the current study attempts to understand the investor investment intentions from the consumer behaviour perspective by taking data from individual investors in Pakistan.

2. LITERATURE REVIEW

This section discusses the relevant literature on investment intentions, consumer behaviour perspective, product knowledge and product involvement.

2.1. Investment Intentions

Investor's periodically increase their income by focusing on the investment as a rational income creating source. Islam (2012) argued that individuals who are part-time investors always try to invest their extra income which depends on the amount of income they earned. Kabra, Mishra and Dash (2010) stated that not all the investments always yield profit and not all the investment leads to loss. To make investment successful, the investors should invest the saving amount intelligently in best available option. Duclos et al. (2013) argued that financial decisions are essentially very crucial decisions, considering that the repercussion, be it positive or negative can have an imperative and critical effect on the individual.

Individuals require money to progress incentive processing or lives (Islamoğlu, Apan & Ayvali, 2015). Normally individuals put some amount of their earning aside for their daily expenses and they invest the remaining amount to guarantee their future survival in a better way. They coordinate economic costs by adopting different financial instruments for saving for various purposes (providing capital gain, capital maintenance, perpetual income generation). In addition to that Islamoğlu et al. (2015) mentioned that single investors face many factors while investing their savings. Recent literature shows that individual's investors who are in the scope of behavioural finance did not invest rationally due to their psychological and demographic characteristics.

Investment decision making is a complex process and emotional stability of the investors determine the effectiveness of decision making (Talha, Ali, & Waheed, 2012). In the complex and uncertain situations, the decision making of investors are induced by their emotions and feelings. The theories of traditional finance normally explain two important assumptions related to the selection of various shares by the investors. Is the rational decision making of investors depends on the basic financial rules of risk-return consideration and investment strategies, after that does investors are unbiased on the prediction of their future stock returns (Tavakoli, Habibi Tanha, & Halid, 2011). In the review of literature, the intention to invest in the stocks from a consumer behaviour perspective has been given very limited attention. This issue arises the need to assess the investment intentions of individual investors by considering them as a consumer and investment in stocks as investment in durable consumer products. In light of above discussion, the current study focus on the factors that affect the individual investors' intention to invest in stock in consumer behaviour perspective. The detailed consumer behaviour perspective of individual investor is discussed in below section.

2.2. Consumer Behaviour Perspective

In the consumer behaviour field, various constructs seem to be predictors of the investment intentions of investors, but the current research chooses more specifics that can be related to investment product in the stock market. In this essence, two category specific ability constructs were found in consumer behaviour literature as the best fit with the current research context. These variables are product knowledge and product involvement. These variables were chosen to assess their influence on intentions to invest. As the current study considered investors as a consumer as earlier suggested by Lim (2013), the research mainly focuses on purchase decision which is related to investment products. In this perspective, investors should be considered as consumers and those factors that affect purchasing intentions also affect investment intentions of investors. Two category specific factors, i.e. product knowledge and product involvement of consumers are found to be more useful that can predict the investment intentions of individual investors.

Engel, Blackwell and Miniard (1995) defined knowledge as “information stored within memory” while the information search was seen to be the motivated activation of knowledge or the acquisition of information. This search for information could be either internal or external. They further explained that in process of acquiring information the activation depends on the retrieval of knowledge while the acquisition depends on the collected information from a real experience of marketplace.

Product involvement is an important aspect of marketing and retailing (Traylor & Joseph, 1984; Laurent & Kapferer, 1985; Zaichkowsky, 1986; Bei & Widdows, 1999) which significantly impact on decision making process of individuals. Consumers’ product involvement has been found to influence the decision. Retail investors often refer to financial news and other information such as analysts’ reports, as a tool for assessment of the risk inherent in those products which they are considering to purchase (Krishnan & Booker, 2002). Retail investors may lack of knowledge and expertise which the required to make sound and thoughtful decisions. Investors can overcome the lack of knowledge and expertise by taking advice from experts and financial consultant. In addition to that they can learn from their past experience about a particular financial product (Harrison, 2003). Lim et al. (2013) mentioned that research in the related area take product knowledge and product involvement as a significant determinants of investment intention of individual investors.

Lim et al. (2016) mentioned that retail investment options are similar to durable consumer products where an economic value is involved and investor hold ownership right upon purchase. Therefore, investment decisions are complex and similar to consumer purchase decision where purchase include a high level of risk and uncertainty. However, it is not guaranteed that rational decision making is used in product purchase decision. The next section discusses the impact of independent variables product knowledge and product involvement in light of previous literature.

2.3. Product Knowledge and Investment Intentions

A high level of knowledge indicates a well-developed knowledge structure, as well as an ability to comprehend and organize information easily. Baker, Hunt, and Scribner (2002) and Laroche, Bergeron, and Goutaland (2003) discussed that consumer product knowledge had been recognised in consumer research as a characteristic that influences the decision-making process at all phases. There are differences in the level of perceptions of product attributes of consumers with many levels of product knowledge. Thorn and Rogerson (2002) viewed that the purchase intention can be influenced in multiple ways by the consumers’ product knowledge. However, consumers may not have the right knowledge or perceive this equivalence.

In addition to that, the level of product knowledge is a significant factor that would determine the purchase intention of the consumer (Lin & Chen, 2006). Consumers often gather information before they purchase a product. Information seeking behaviour enable consumers to make a better decision with more understanding on product features and increase the probability of being satisfied with consequences of their decisions (Shaver, 2007).

Knowledgeable people are likely to make better choices than less knowledgeable people (Blackwell, Miniard & Engel, 2006). Lin and Chen (2006) reported that product knowledge of a consumer is an important factor that positively influence the intention to purchase. Furthermore, it influences the consumer purchasing intention. Product knowledge also plays an important role in consumer behaviour because, at different levels of knowledge, consumers act differently (Shirin & Kambiz, 2011).

Previous studies highlighted product knowledge as an important factor while assessing the investment intentions. In the study of Talha et al. (2012), it was proved that there is a strong positive influence of knowledge about investment products of a company on individual investors' investment decisions. Lim et al. (2013) also found that there is a significant impact of product knowledge on investment intentions of individual investors. Product Knowledge of financial product enables investors to handle their investment in a successful way. Their knowledge develops a strong conceptual structure among them which equips them with techniques to process only relevant information and avoid irrelevant and unimportant information on investment (Mishra & Kumar, 2011).

Product knowledge acts as an essential element that investors required before they made a decision to invest in stocks. Based on Lim et al. (2013) product knowledge appeared as more significant factor that influences the individuals' intentions to invest. This knowledge also increases their ability on investment, and increase the likelihood that individual will invest in the stocks. The above argument of the view that, the higher product knowledge will impact on individual investors' intention to invest in a particular stock. It is expected that product knowledge would have a direct positive effect on investment intentions of individual investors to invest in the stock market. The above arguments, lead to the following hypothesis.

Hypothesis1: Product knowledge will have a significant positive impact on investment intention of individual investors.

2.4. Product Involvement and Investment Intentions

Based on literature and previous findings, many factors influence the consumer's behaviour related to decision to purchase. These factors depend on the consumer's experience and knowledge. Among the consumers, few make decision quickly but others need more information and time before making purchase decision. The level of involvement in certain products shows the interest of the consumer and the importance of the specific product. Moreover, involvement also reflects the amount of information required for decision making (Lin & Chen, 2006). It reveals that more information about the product will determine the intention towards buying the product.

The past literature emphasised on the significance of product involvement for assessing the investment intentions of individual investors. The level of information required to make decision depends upon the nature of investment decision which ranges from less involvement to the decision need higher level of involvement (Tanner & Raymond, 2010). For investors, those associate high levels of importance to certain product(s) possess higher level of long term involvement with that particular investment product (Mishra & Kumar,2011). This high level of involvement in turn act as a source of increase in intention to purchase a particular investment product.

Lim et al. (2016) mentioned that those individuals have more involvement usually search for extensive information on product features such as benefits and attributes before they make buying decision. Generally, individuals with high level of involvement have greater ability to evaluate the product and compare the price with reference to its quality. This ability of product evaluation will create high level of intention to purchase and influence purchase decision (Lim et al. 2013). In the context of current research, it has been proposed that high product involvement of individual investors will lead to high investment intentions. In the light of the previous literature and above arguments, the following hypothesis is formed.

Hypothesis 2: Product involvement will have a significant positive impact on investment intention of individual investors.

In the current study the effect of independent variables (product knowledge, product involvement) has been tested on dependent variable (investment intentions). This research proposed that product knowledge and product involvement will have significant positive influence on investment intentions of individual investors.

Figure 1 shows the research framework.

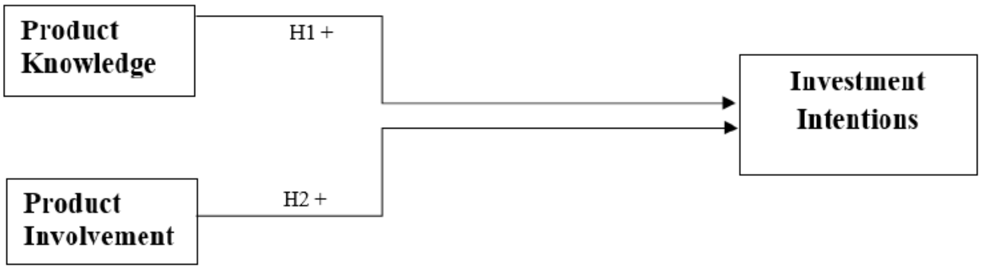

Figure 1 Proposed Research Model

3. METHODOLOGY

3.1. Sample Selection and Data Collection

In this study, the sampling frame consists of the employed individuals working in public and private organizations in Pakistan. The data was collected from the 548 individuals working in different organizations of Pakistan. The self-administered questionnaire using 5 point Likert scale was used to collect the data from the individual investors. A sample of more than 250 respondents was obtained to ensure the sufficiency of the data to run the proposed model using SEM as suggested by Bentler and Chou (1987). The sample of the current study consists of 65% males and 33% of females. The majority of the respondents belong to 25-35-year age group and most of the respondents were unmarried. Among them 32% of the respondents belongs to income Rs. 25,000-50,000, 21% belongs to income group Rs. 51,000-75,000 and most of the respondents have post-graduate degrees as their highest qualification. The demographic analysis of respondents shows a well balance representation of population.

3.2. Measures

The measurement scale for measuring any constructs is considered an important aspect in any research (Mishra, Pandey, Singh, & Gupta, 2018). In order to use an appropriate, reliable and valid measure, the review of related studies was conducted. The review of literature results in the reliable and valid scales that are used by previous researchers and hold acceptable level of reliability and validity. Mohajan (2017) also mentioned that reliability and validity are two criterions on the basis of which we can evaluate the goodness of a scale. The details are given in the Table 1.

Table 1 Measurement Scale

Constructs	No. of Items	Sample item	Source
Product Knowledge	7	“I know a lot about investing in stocks”.	Lim et al. (2013)
Product Involvement	11	“Making a decision to invest in stocks would be significant to me”.	Lim et al. (2013)
Investment Intention	7	“I intend to invest in stocks in the upcoming months”	Lim et al. (2016)

Demographic Variables: In this study the information about the respondents such as gender, age, marital status, income and academic qualification were taken as the demographic variables.

4. DATA ANALYSIS

The descriptive data analysis was conducted using SPSS 22. The further analysis of measurement model such as construct reliability and validity was done using SEM-PLS 3.3.2. Moreover, in SEM-PLS the Henseler, Ringle and Sinkovics (2009) proposed a two-step (measurement model and structural model) method to evaluate and report the generated results.

The appropriateness of scale items has been assessed using measurement model. In the constructs, those items whose factor loading was low, they were removed and only items with acceptable factor loading were retained (i.e. 0.50-0.70 as per Chin, 1998; Hair, Anderson, Babin, & Black, 2010). In addition to that construct reliability (CR) was measured using Fornell and Larcker (1981) criterion where value of CR should be 0.70 or above indicates acceptable level of reliability. Moreover, Average variance extracted (AVE) was used to assess the convergent validity, if the AVE value is above 0.50, constructs hold convergent validity. While discriminant validity was carried out using cross-loading values of latent variables. The value of the cross loading in corresponding variable should be higher than loadings in other constructs (Chin, 1998). The measurement model is assessed in next section.

4.1. Measurement Model

The measurement model is necessary to assess the measurement used in the current research to ensure the quality of the research instruments as suggested by Anderson and Gerbing (1988). As per criterion suggested by Chin, Gopal and Salisbury (1997) and Gholami, Sulaiman, Ramayah and Molla (2013), the loadings of the indicators should be above 0.6. The value of AVE should be above 0.5 and CR should be above 0.7. The detailed measurement model is given in figure 2. The fulfilment of these criterions assured the fitness of the measurement model. The details are given in Table 2 and Table 3.

Table 2 The measurement properties of constructs

Constructs	Items	Loadings	AVE	CR
Product Knowledge	PK1	0.730	0.559	0.898
	PK2	0.798		
	PK3	0.815		
	PK4	0.755		
	PK5	0.570		
	PK6	0.763		
	PK7	0.775		
Product Involvement	PI1	0.604	0.533	0.888
	PI5	0.706		
	PI6	0.754		
	PI8	0.793		
	PI9	0.672		
	PI10	0.790		
	PI11	0.772		
Investment Intentions	II1	0.747	0.680	0.937
	II2	0.797		
	II3	0.840		

	II4 II5 II6 II7	0.880 0.864 0.861 0.775		

PK (Product Knowledge), PI (Product Involvement) and II (Investment Intentions)

Table 3 Discriminant Validity

	1	**2**	**4**
Product Knowledge	**0.748**		
Product Involvement	0.539	**0.730**	
Investment Intentions	0.492	0.551	**0.825**

Note: Bold values represents the square root of AVE

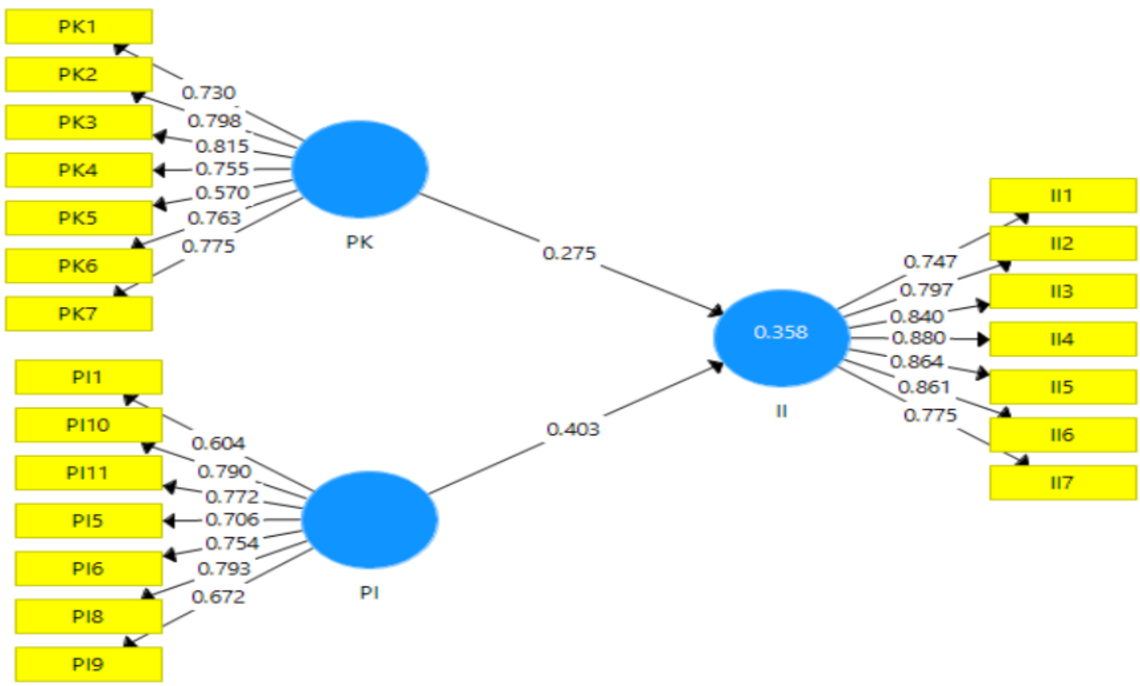

Figure 2 Measurement Model

4.2. The structural model Analysis

Consequently, the structural model was estimated. After ensuring the reliability and validity of constructs using the measurement model, the refined items were used to test the hypothesis. The full structural regression model is shown in figure 3. The summary of the hypothesis testing is shown in Table 4. The estimates from the model shows that there is a significant positive impact of product knowledge on investment intentions of individual investors (β=.275, $p<0.01$). Moreover, the results showed that product involvement also have significant positive impact on the investment intentions of individual investors (β=.405, $p<0.01$).

Table 4 Hypothesis Testing

Hypothesis	**β**	**p-value**	**Results**
H_1: PI ⟶ II	0.275	0.000	Supported
H_2: PI ⟶ II	0.405	0.000	Supported

PK (Product Knowledge), PI (Product Involvement) and II (Investment Intentions)

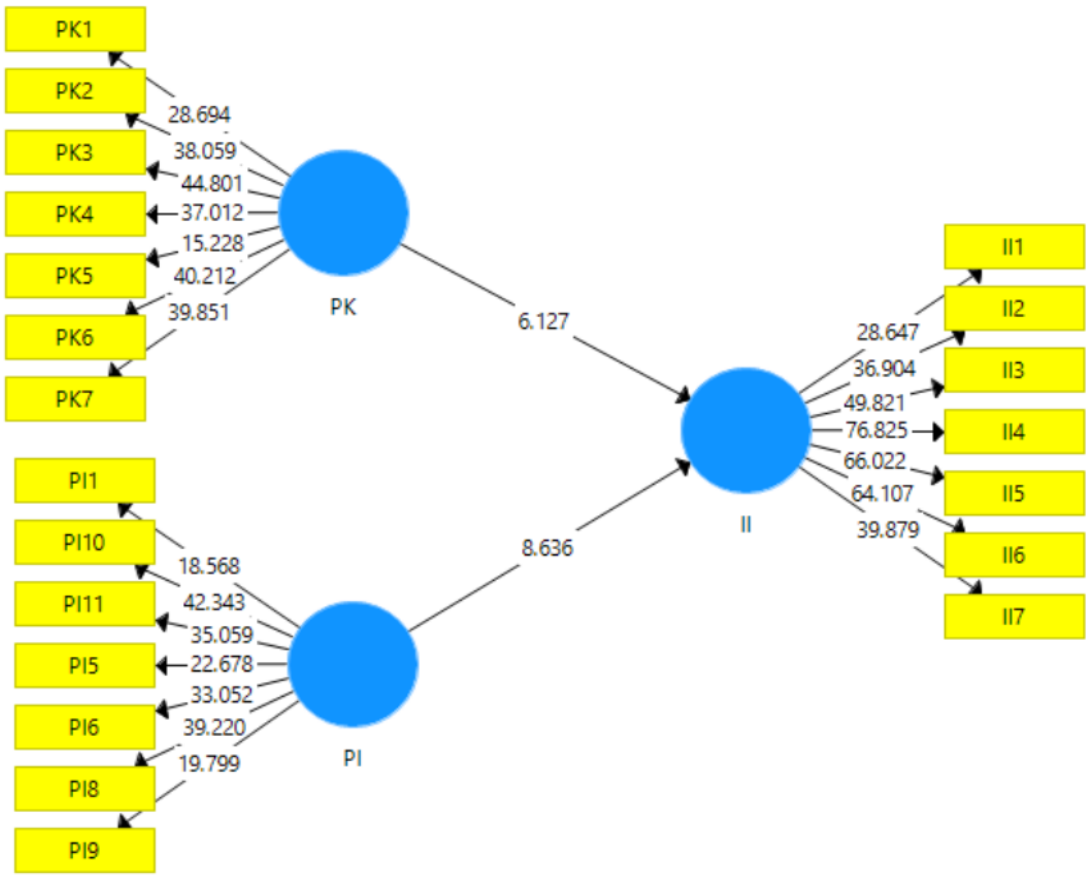

Figure 3 Structural Regression Model

The overall results of the model showed that there is a positive significant impact of both product knowledge and product involvement. Product knowledge exerts significant influence of the investment intentions of individual investors, the results are support by previous study of Lim, Soutar and Lee (2013), where they found product knowledge as a significant influence on the investment intentions. Product knowledge enables investors to evaluate the available investment options and choose the option that can provide maximum. More knowledge leads to a higher probability that an investor will invest in the stock market. An individual with more product knowledge possesses more expertise in stock investment. Their expertise and abilities lead to higher investment intentions to invest in stocks. The finding suggests that product knowledge provides an understanding of stock market investment and prepare investors to invest wisely. Those individual investors have more knowledge possess, the more ability to invest and higher investment intentions.

Specifically, product involvement found to be the stronger factor that influences the investment intentions of individual investors and align with the findings of the Lim et al. (2016) and Ibrahim and Arshad (2018). Lim et al. (2016) suggested that as people involve in stock market products, they are more likely to invest in those products. High involvement shows a positive attitude towards investing in the stock market. In the context of the current study, involvement can create a significantly high probability that urges investor to invest in the stock market. In the presence of the high involvement, there is a high probability that an investor will invest in the stock market.

5. CONCLUSION

This study aims to assess the effect of consumer behaviour factors such as product knowledge and product involvement can significantly impact on the investment intentions of individual investors. These factors have been discussed to develop the argument on how consumer behaviour factors can predict the intention of individuals to invest in stocks. The study found that both consumer behaviour factors (product knowledge and product involvement) significantly impact on the investment intentions of individual investors and concluded that individual investors should be considered important as consumers.

Moreover, increasing the ability of investors and enhancement of their involvement will increase their intention to invest in stock markets. From a practical perspective, practitioner should focus on understanding the intention of investors from consumer behaviour perspective to identify the factors that potentially influence their intention to invest. From the perspective of financial advisors', the results of the study are important because these financial advisors who deal with various individuals have distinct capabilities and investment related backgrounds. Individuals who are new to stock market investments usually have less knowledge and familiarity with the financial products. The stock market advisors and policy makers should focus on the aspect of creating awareness among the individuals and put efforts to increase the level of involvement of the investors. This increase in familiarity and involvement can be a significant source of increase in investment intentions.

6. IMPLICATIONS

The current study highlights the phenomenon of individual investors' investment intention from the perspective of consumer behaviour. Lack of clarity and less explanation provided in the previous research studies on how an investor can be treated as a consumer and how consumer behaviour can be helpful in explaining investment intentions of individual investors. This research presents a framework based on previous research theories for understanding the impact of consumer behaviour to understand investment intentions of investors. This study expands the literature in the field of consumer behaviour by taking into account construct such as product knowledge and product involvement and successfully provide empirical support in favour of proposed hypothesised relationships.

The findings of this study put forward some practical implications that are relevant for SECP, stockbrokers and individual investors. The knowledge and involvement of the investors act as important factors that impact on investment decisions. In a place where the investors have more knowledge and involvement, there is a high probability of investment in the stock market. SECP and PSX should arrange seminars and awareness program in different cities where stock market investment still considered as an unknown phenomenon.

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