“Examining the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan”

AUTHORS	Yusnidah Ibrahim Imran Arshad

ARTICLE INFO	Yusnidah Ibrahim and Imran Arshad (2017). Examining the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan. *Investment Management and Financial Innovations*, *14*(4), 181-193. doi:10.21511/imfi.14(4).2017.15
DOI	http://dx.doi.org/10.21511/imfi.14(4).2017.15
RELEASED ON	Monday, 25 December 2017
RECEIVED ON	Monday, 25 September 2017
ACCEPTED ON	Saturday, 09 December 2017

LICENSE	This work is licensed under a Creative Commons Attribution 4.0 International License

JOURNAL	"Investment Management and Financial Innovations"
ISSN PRINT	1810-4967
ISSN ONLINE	1812-9358
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES	NUMBER OF FIGURES	NUMBER OF TABLES
71	2	3

© The author(s) 2026. This publication is an open access article.

BUSINESS PERSPECTIVES

LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10, Sumy, 40022, Ukraine

www.businessperspectives.org

Yusnidah Ibrahim (Malaysia), **Imran Arshad** (Pakistan)

EXAMINING THE IMPACT OF PRODUCT INVOLVEMENT, SUBJECTIVE NORM AND PERCEIVED BEHAVIORAL CONTROL ON INVESTMENT INTENTIONS OF INDIVIDUAL INVESTORS IN PAKISTAN

Abstract

This study aims to examine the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan. The data were collected from 548 individual investors in Pakistan using systematic random sampling. The data analysis was done using descriptive and inferential statistics. The results of the analysis showed that product involvement and subjective norm have a significant impact on investment intention of individual investors in Pakistan. On the other hand, the perceived behavioral control appears as insignificant in influencing the investment intentions of individual investors. The results of the analysis can be helpful for the investment advisors in efforts to increase the level of involvement. They need to develop and promote customized investment portfolios for their customers that suit their risk profile, investment objectives and financial constraints.

Received on: 25th of September, 2017
Accepted on: 9th of December, 2017

© Yusnidah Ibrahim, Imran Arshad, 2017

Yusnidah Ibrahim, Ph.D., Professor of Finance, School of Economics, Finance and Banking, Universiti Utara Malaysia, Malaysia.

Imran Arshad, Ph.D., Scholar, School of Economics, Finance and Banking, Universiti Utara Malaysia, Malaysia.

Keywords product involvement, subjective norm, perceived behavioral control, investment intentions

JEL Classification D91, G41

INTRODUCTION

The stock market can be regarded as a system of human interactions. In investment perspectives, investors exchange information and discuss stocks with their neighbors, friends, relatives and colleagues. Investors seek advice on the investment option from advisors, bankers, analysts and planners before the actual investment. The involvement of various aspects in the investment decision-making, investment decision-making can be categorized as complex decision-making behavior (Hirschey & Nofsinger, 2008; Shanmugham & Ramya, 2012). Researchers in economic psychology and behavioral finance have recently become interested in the issue of how investors' subjective perceptions about companies may influence their decisions to invest in the companies' stocks, for example, Ang, Chua, and Jiang (2010), Aspara and Tikkanen (2008), Aspara (2013), MacGregor, Slovic, Dreman, and Berry (2000), Statman, Fisher, and Anginer (2008).

This is an Open Access article, distributed under the terms of the Creative Commons Attribution 4.0 International license, which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Involvement of individuals in investment activities has been part of the popular debate surrounding investment habits in Pakistan. Specifically, there has been significant concern about the low savings in financial instruments as opposed to savings in gold and real estate. In Pakistan, market capitalization as a percentage of GDP was only 24.6% in the year 2015 as compared to 261.6% in Singapore, 135.8% in Malaysia, 113.4% in Thailand, 85.97% in India and 98.36% in China, as reported by National Inflation Association USA (2016)[1]. Investment levels across countries are still not up to normative standards (Guiso & Sodini, 2013). Amongst emerging economies, Pakistan is a good example where despite high savings rates and forward-looking regulations, there is very low penetration of individual in the stock market. According to Security Exchange Commission Pakistan (SECP, 2016)[2] report, with over 60% of the population living in the rural and semi-urban areas, the capital market has negligible outreach.

In the previous literature, various factors such as demographic profile of investors, risk tolerance level, psychological factors and consumer behavior factors (Aspara, 2013; Cole, Paulson, & Shastry, 2012; Grinblatt, Keloharju, & Linnainmaa, 2011; Guiso & Jappelli, 2005; Hong, Kubik, & Stein, 2004; Lim, 2013; Mahastanti & Hariady, 2014) have been discussed as potential factors that influence an individual intention to invest in stocks. However, there are very few studies pertaining to emerging markets where these factors and their effects on investment intention have been studied together.

Among the factors that enhance investment intentions of the individual investor, product involvement appears as a most significant contributor as reported by Aspara (2013), Lim (2013). Laroche, Vinhal Nepomuceno, and Richard (2010) mentioned that higher involvement generates a stronger relationship between evaluation difficulty and perceived risk for the product category perspective and impact on investment decision-making. Moreover, in investment intention, Theory of Planned Behavior (TPB) provides a very strong theoretical model to predict behavioral intentions. The behavior, subjective norm, and perceived behavioral control are the significant three basic elements of TPB in explaining behavior that has been claimed in multiple studies (Sommer, 2011). As previously mentioned, application of psychological models to examine investors' decisions is an emerging subject in the field of behavioral finance. Cuong and Jian (2014), Pascual-Ezama, Scandroglio, and Gil-Gomez de Liaño (2014) are among few researchers who assessed the impact of TPB factors on investment behavior of individual investors. However, considering that the evidence-based findings are very limited in this subject matter, this research attempts to bridge this gap by applying the TPB in the capital market context.

The application of the TPB in the context of stock investment assumes that the general willingness and intention to invest in stock drive the actual purchase of stock. Furthermore, it is possible that individuals are more willing to purchase stock if their attitudes, subjective norm and perceived behavioral control are positive. It is possible that many of the consumer constructs that were found to have influenced complex purchase decisions are in fact applicable to study investment intentions.

It is critical to assess whether consumer behavior factors (product involvement) and psychological factors (subjective norm and perceived behavioral control) can significantly develop the investment intentions among individuals in Pakistan. These are the gaps in the body of knowledge of financial products which this study seeks to address. The current study aims to assess the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan using Theory of Planned Behavior (TPB).

1 http://inflation.us/

2 https://www.secp.gov.pk/document/annual-report-2016/

1. REVIEW OF LITERATURE AND HYPOTHESES DEVELOPMENT

This section reviewed the related literature on product involvement, subjective norm, perceived behavioral control and investment intentions and develops hypotheses based on the previous literature.

1.1. Investment intentions

Intentions are assumed to capture the motivational factors that influence a behavior and to indicate how hard people are willing to try or how much effort they would exert to perform the behavior (Ajzen, 1991). According to Ajzen (1991), as a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance. Intention can thus be construed as a predictor of behavior. Several studies involving financial products have used investment intention as a dependent variable to measure the intention to invest (Dey, Chauhan, & Chakraborti, 2015; Kozup, Howlett, & Pagano, 2008; Lim, Soutar, & Lee, 2013; Sivaramakrishnan, Srivastava, & Rastogi, 2017).

The decision-making process is very complex and the effectiveness of decision-making depends on the emotional stability of the investor (Talha, Ali, & Waheed, 2012). The nature of investor's decision is not the same and it depends on the personal attitudes and share's characteristics. During the recent years, studies on behavioral finance have depicted that financial decision-making of investors depends on the external and internal behavioral factors (Baghdadabad, Tanha, & Halid, 2011; Shefrin & Statman, 2000; Shefrin, 2002). The behavior of investor is considered as complex financial market procedure and it has remained the focus of present and past studies of capital market (Iqbal, Hussain, Latif, & Aslam, 2013). The behavior of investors has been studied from the perspective of institutional investors, as well as individual investors, and also from the perspective of domestic investors and foreign investors. The main object of the investors' investment usually either capital appreciation or current income or balance of capital appreciation (Sultana, 2010). This study aims to study the investment intentions of the individual investors from the perspective of consumer behavior and psychological perspective.

1.2. Product involvement and investment intentions

Product involvement concept is viewed as a focal structure, imperative to the comprehension of decision-making behavior of the consumer (Chakravarti & Janiszewski, 2003). The personal relevance of an object in accordance with inherent interest, values and needs is referred to as involvement (Zaichkowsky, 1985). Thus, the importance, attachment, motivation or interest manifested towards an object is understood to be involvement. The consumers' level of familiarity with the product is proportional to the extent to which consumers rely on procedural fairness (Shehryar & Hunt, 2005).

In view of Aspara (2013), an individual's enduring perception that an object (in our case, a product category/domain) is intrinsically important or relevant to him personally, reflecting his identity and personal values. Aspara (2013) systematically examined that how investor's affective and subjective valuation of company's brand and products influenced the propensities of the investor to consider companies as investment targets. The personal relevance represented by particular products of the company had a negative impact on the consideration that single investor presents to substitute the investments targets while deciding to invest in the stock of the company. Effective assessment of individuals for the organization's brand positively affects his optimism regarding financial returns of the organization's stock. Moreover, to some extent, in spite of what prior studies suggest, an individual's knowledge with a specific organization's image as such does not diminish the thought he provides for option investment targets, nor is it connected to conceit about the financial returns of that organization's stock (Aspara, 2013).

Aspara, Olkkonen, Tikkanen, Moisander, and Parvinen (2008) suggest that an individual's "affinity" for a product category, implicating personal relevance and positive personal value, largely stems from the perception that the product category in question supports or represents such domains to which the individual attaches personal relevance and positive value. Consumers neither

wish nor are able to exert a great deal of effort to process information in a low involvement situation (Chung & Zhao, 2003). In another vein, consideration of the congruence between brand image and self-concept is done by highly involved consumers (Laroche et al., 2010). Lim (2013) and Lim et al. (2013) studied the influence of various consumer behavior constructs on the investment intentions of individual investors to invest in stock market.

Product involvement influences people's general approach to the consumer decision process (Clarke & Belk, 1979; Laurent & Kapferer, 1985). Involvement is also a key element in revealing an individual's identity or sense of self (Bei & Widdows, 1999; Traylor & Joseph, 1984). Studies have also shown that highly involved consumers possess sufficient information required in the decision-making process as compared to the low involved consumer with a particular product (Chaiken, 1980), which results in fewer alternative acceptance by the highly involved consumers (Petty, Cacioppo, & Goldman, 1981). Those consumers who are highly involved in a particular product have better knowledge about the product attributes as compared to less involved consumers. Moreover, highly involved consumer depicts greater ability to evaluate the products in terms of quality and price (Chandrashekaran & Grewal, 2003; Richins & Bloch, 1986), leading to higher purchase intentions.

The results of the various studies emphasized the importance of product involvement on investment intentions of individual investors. Laroche et al. (2010) found that higher involvement generates a strong relationship between investor and reduce the difficulties of evaluation and impact significantly on investment decisions of investors. Investors who attach high importance to the specific investment product(s) are likely to show a high level of enduring involvement with that investment product (Huhmann & Bhattacharyya, 2005; Mishra & Kumar, 2011).

In addition, Lim (2013) also examined various factors that impact on investor decision-making and found that product involvement has a significant impact on the investment decision-making. In Harrison (2016), it was reported that product involvement significantly impacts on the investment intentions of individual investors. In the process of investment decision-making, the involvement of the investors significantly affects the investment intentions of the investors. Highly involved investors may have more investment intention as compared to those with a low-level of involvement. This study also proposed that product involvement will have a significant impact on the investment intentions of individual investors. Based on the above discussion and past literature, this study postulates the following hypothesis.

H1: Product involvement will have a significant impact on investment intention of individual investors.

1.3. Subjective norm and investment intentions

Subjective norms is the results of the perception of what peers of groups who are important think about the particular behavior and the motivation to comply with these views (Ham, Jeger, & FrajmanIvković, 2015). In the investment decision perspective, East (1993) documented that investment intentions of a person are significantly influenced by the opinion of the family and friends. Moreover, wealthier investors were found to be interested in sustainable investment due to the positive image of society towards sustainable investment (Eurosif, 2012). It can be expected that there is perceived public pressure that leads to investment in the sustainable investment projects and subjective norms is supportive towards the intention to invest in sustainable investment opportunities (Paetzold & Busch, 2014).

In addition to that, subjective norm is the combination of the perceived expectations form relevant individuals and intentions to comply with the expectation of these important individuals. Knowing beliefs of an individual can be important in knowing the attitude of the individual (Pohja, 2009). Other studies by Shanmugham and Ramya (2012), Alleyne and Broome (2011) examine the investment intention by employing the Theory of Planned Behavior. Shanmugham and Ramya (2012) reported that subjective norm is found to be negatively related with intention towards trading, while Alleyne and Broome (2011) reported that subjective norms is a significant predictor of investment intentions.

Pascual-Ezama et al. (2014) assessed the investment intentions of real investors and they found that subjective norms impact significantly on investment intentions of real investors. On the other hand, Mahastanti and Hariady (2014) also conducted studies to investigate the intentions of investors to buy financial products. The result suggested that investors' decision to buy the financial product was not affected by subjective norms and attitudes. Moreover, Cuong and Jian (2014) examined the factors influencing individual investors' behavior to invest in stock market.

The results of the study showed that there is a significant influence of subjective norms on behavioral intentions of investors in stock market. The mixed results of the previous research studies such as Shanmughan and Ramya (2012) found a negative impact of subjective norm, Cuong and Jian (2014) and Pascual-Ezama et al. (2014) found a significant impact, while Mahastanti and Hariady (2014) found the non-significant impact of the subjective norm on intentions. The current study based on the above discussion proposed that opinion of friends and family is of immense importance in collective culture such as Pakistan and proposed that subjective norm will significantly impact on investment intentions of individual investors in Pakistan. Based on the previous literature and above discussion, this current study formulates the following hypothesis.

H2: Subjective norm will have a significant impact on investment intention of individual investors.

1.4. Perceived behavioral control and investment intentions

In the current study, perceived behavioral control (PBC) has been proposed to have a significant influence on the investment intentions. In this study, perceived behavioral control has been referred to the ability of the investors to control over performing a particular behavior in stock investment context. Hamid (2014) stated that people's judgement is reflected by perceived behavioral control about their ability to perform judgements and behavior about independence over the decision to perform the behavior. When a person considers performing a particular behaviour, perceived behavioural control is the answer of the person to the question. There is an expectation of being motivated to perform the behaviour from people with high perceived behavioural control (Yzer, 2012).

According to Ajzen (2002), PBC could influence in two ways as claimed by the Theory of Planned behavior: the intention to perform behavior could be affected by PBC; also in a way dependent from the concerned intention, PBC could directly affect the behavior. The investors' process of decision-making and in their behaviour could be involved by these two control factors. The control factors could be internal or external. The external control factors are financial resources, time or partners' cooperation while the internal control factors are individual knowledge, experience and skills (Ajzen, 2005). Moreover, individuals who have high level of perceived behavioral control possess more willingness to perform or not perform a particular behavior, because PBC exert direct influence on the behavior of the individual (Ajzen, 2006) and lead to perform the particular behavior (Armitage & Conner, 2001), particularly when the behavior is not under volitional control and to the extent that it is an accurate reflection of actual behavioral control (Ajzen, 2002).

In addition, Fishbein and Ajzen (2011) explained that PBC describes the ability of an individual to have control, and perceived ease or difficulty in performing that particular behavior. In this essence, TPB argued that a positive attitude and subjective norm towards intention does not guarantee that an individual will perform the behavior if the control to perform the behavior is missing. PBC exists from personal and environmental factors such as having the skills and opportunities to engage in a particular behavior. In line with this, Armitage and Connor (2001) also described that in many studies, perceived behavioral control has improved the forecasting of intention. Furthermore, PBC accounted for significant amounts of variance in intention and behavior (Knabe, 2012).

In this perspective, Cuong and Jian (2014) found that there is a significant relationship between perceived behavioral control and behavioral intention of individual investors. Thus, regarding the investment in stock, perceived behavioural control should be positively related to willingness

and intentions. Individual's judgement is reflected by PBC about their ability to perform judgements and behavior about independence over the decision to perform the behavior (Hamid, 2014). Yzer (2012) argued that when a person considers performing a particular behavior, PBC is the answer of the person to the question. There is an expectation of being motivated to perform the behaviour from people with high PBC.

There are very few empirical studies on PBC and investment intentions. In the context of the stock market, Gopi and Ramayah (2007) assessed the impact of PBC to predict the intention to trade online. The study proved the positive impact of PBC on the behavioural intention of Internet stock trading. Alleyne and Broome (2011) determined individual factors that are likely to influence the investment decisions of potential investors and the results of analysis support that PBC has a strong significant influence on investment decisions of potential investors. Cuong and Jian (2014) also found that there is a strong significant relationship between perceived behavioral control and individual investor's intention to invest in stocks. On the other hand, few studies such as Al-Swidi, Mohammed Rafiul Huque, Haroon Hafeezand Noor MohdShariff (2014),Van Hooft and De Jong (2009) disconfirmed the impact of PBC on intentions. These studies reported that PBC does not influence on the intention and appears as an insignificant contributor towards behavioral intentions.

The results of previous experimental studies are in line with TPB literature and showed that PBC could be accounted for considerable variance in intention and behavior, and also prove a positive link between PBC and intention (Fu, Farn, & Chao, 2006; Knabe, 2012; Mathieson, 1991; Shih & Fang, 2004). The perceived behavioral control has been found as a significant factor that influences on intentions in the most of the previous research studies. It is argued in the context of the current study that those investors who have stronger control over their decisions are likely to have stronger investment intentions. Based on the abovementioned discussion, this study proposed that PBC would have a significant influence on investment intentions. The following hypothesis has been formulated.

H3: Perceived behavioral control will have a significant impact on investment intention of individual investors.

2. METHODOLOGY

This section elaborates the data collection procedures, instruments and data analysis techniques employed to achieve the objective of the current research.

2.1. Instruments

A questionnaire was developed as the research instrument. It consists of two sections. The first section asks about the demographic profile of respondent and second section elicited information about product involvement, subjective norm, perceived behavioral control and investment intentions of the individual investor.

The measures of the underlying constructs of the study were carefully chosen from previous literature in the field. The measure for product involvement was adapted from the study of Lim (2013), while the measure for subjective norm was adapted from Schmidt (2011), Tai and Ku (2013). The measurement for the perceived behavioral control was adapted from Mahastanti and Hariady (2014), Pascual-Ezama et al. (2014), Schmidt (2011). Furthermore, the measurement for investment intention was adopted from the study of Lim (2013), Allen, Gupta, and Monnier (2008).

2.2. Data collection

The data for the current research were collected from a sample of 548 individual investors from major cities of Pakistan which includes Lahore, Karachi, Sukkur, Multan and capital city Islamabad. The data collection was done using self-administered questionnaire. The systematic random sampling was used to collect the data from the respondents. Registrar offices and Human Resource Departments were contacted to get the list of the employees and with the help of the concerned office, the employees were approached.

In a descriptive analysis of demographics of the respondents, it was found that among the respon-

Table 1. Demographic profile of the respondents

Demographic factors	Components	Frequency	Percent
Gender	Male	357	65.1
	Female	181	33.0
	Missing	10	1.8
	Total	548	100
Age	Less than 25 years	155	28.3
	25-35 years	284	51.8
	36-45 years	55	10.0
	46-55 years	29	5.3
	56 years or above	13	2.4
	Missing	12	2.2
	Total	548	100
Income	Below Rs. 25,000	117	21.4
	Rs. 25,000 – Rs. 50,000	174	31.5
	Rs. 51,000 – Rs. 75,000	117	21.4
	Rs. 76,000 – Rs. 100,000	82	15.0
	Rs. 101,000 and above	40	7.3
	Missing	18	3.3
	Total	548	100
Qualification	Intermediate	19	3.5
	Graduate	182	33.2
	Postgraduate	260	47.4
	Ph.D.	59	10.8
	Others	18	3.3
	Missing	10	1.8
	Total	548	100.0
Marital status	Unmarried	326	59.5
	Married	199	36.3
	Divorced	10	1.8
	Widow	3	0.5
	Missing	10	1.8
	Total	548	100.0

dents, 65% were male and 33% were female respondents. Among the respondents, of them mostl were from the age group 25-35 years and have an average income Rs. 25000 – Rs. 50,000. While the majority of the respondents hold a postgraduate degree. The detail on the demographic profile of respondents is given in Table 1.

2.3. Data analysis method

The proposed relationships in the model were tested using the structural model. The current study employed two-step approach as suggested by Anderson and Gerbing (1988). In the first step, a measurement model was run to test the reliability and validity of the constructs. After ensuring that the construct used is adequately reliable, the structural model was used to test the proposed hypotheses.

In the measurement model, CFA technique was used to assess the items of the constructs, and the items with lower factor loadings were removed. The construct reliability and validity were assessed using the criterion suggested by Fornell and Larcker (1981), in which the construct validity is assumed when the value of the composite reliability is 0.70 or above. The constructs will be assumed to have acceptable construct validity when the value of Average Variance Extracted (AVE) is 0.50 or above.

In the current study, both reliability construct validity and composite reliability were established, and all the constructs fulfilled the criterion given by Fornell and Larcker (1981). The structural model was run using AMOS 22.0. The properties of the constructs of the current research were examined in a variety of ways to ensure that the measurements fulfil the criteria and are suitable to

Table 2. Constructs reliability and validity

Constructs	Mean	Std.	CR	AVE	PBC	PI	SN	II
PBC	2.8694	.6377	0.840	0.514	0.717	–	–	–
PI	2.9284	.6722	0.837	0.508	0.515	0.713	–	–
SN	2.9896	.6706	0.771	0.529	0.656	0.528	0.727	–
II	2.3854	.6675	0.920	0.624	0.493	0.550	0.623	0.790

measure the relationship between variables. The item having low factor loadings was removed in the process of structural modelling. In the results of the measurement model, all revised constructs fitted with the data and had acceptable values of reliability and convergent validity.

3. FINDINGS

In descriptive analysis of the data, it was found that the mean value of product involvement is 2.9284, which is in between disagree and neutral but more inclined towards neutral. The value indicates the neutral response of the response towards product involvement. It was also revealed that respondents also have neutral response towards subjective norm as the mean value is 2.9896. Moreover, the mean value of perceived behavioral control showed indicates that respondents are neither agree nor disagree on the statement for perceived behavioral response as indicated by a mean value of 2.8694. Furthermore, the respondents have a slight disagreement towards the statements of investment intentions. The mean value (2.3854) shows a response between disagree and neutral, but the value is more inclined towards disagree. The details are given in Table 2.

The measurement model using all constructs was estimated before estimating the structural model based on the suggestions of Anderson and Gerbing. The measurement model as shown in Figure 1 was significant based on the value of χ^2 $\left(\chi^2 = 508.268; p < 0.01\right)$. The other goodness-of-fit indices also suggested that the measurement model has a good fit with the data (CFI = 0.943; SRMR = 0.054; RMSEA = 0.064). The construct posθ sessed good measurement properties with acceptable thresholds, and all of the constructs were suitable for use in the measurement and structural models.

The results of reliability and validity test showed that all the constructs showed anadequate level of Cronbach's Alpha and AVE. For instance, AVE for PI (0.508), SN (0.529), PBC (0.514) and II (0.624), which showed that the value of AVE is above 0.50. Meanwhile, the reliability of the all constructs also greater than 0.70 as suggested by Fornell and Larcker (1981). The results of the measurement model in Table 2 indicated that constructs are sufficiently reliable for hypothesis testing.

Hypotheses testing was done with the help of SR model. The data were tested for the assumptions of the multiple regression. It was found that the data fulfil assumptions of normality, linearity and multicollinearity and suitable for hypotheses testing.

The results of the data analysis using the structural model as in Figure 2 showed that product involvement significantly impacts on the investment intention $\left(\beta = .276; p \le .01\right)$. The results indicate that product involvement explains 28% of the variations in the investment intentions of the investors. Moreover, subjective norm also has a significant influence on investment intentions $\left(\beta = .400; p \le .01\right)$ and the results indicate that 40% of the total variation in investment intention is explained by the subjective norm.

Table 3. The structural model path coefficient

Model	Investment intentions (II)			
	β	T	Sig.	Results
PI	.276	5.194	.000	Supported
SN	.400	6.089	.000	Supported
PBC	.061	.988	.323	Not supported

Notes: * Dependent variable: II = investment intentions. * PI = product involvement, SN = subjective norm, PBC = perceived behavioral control.

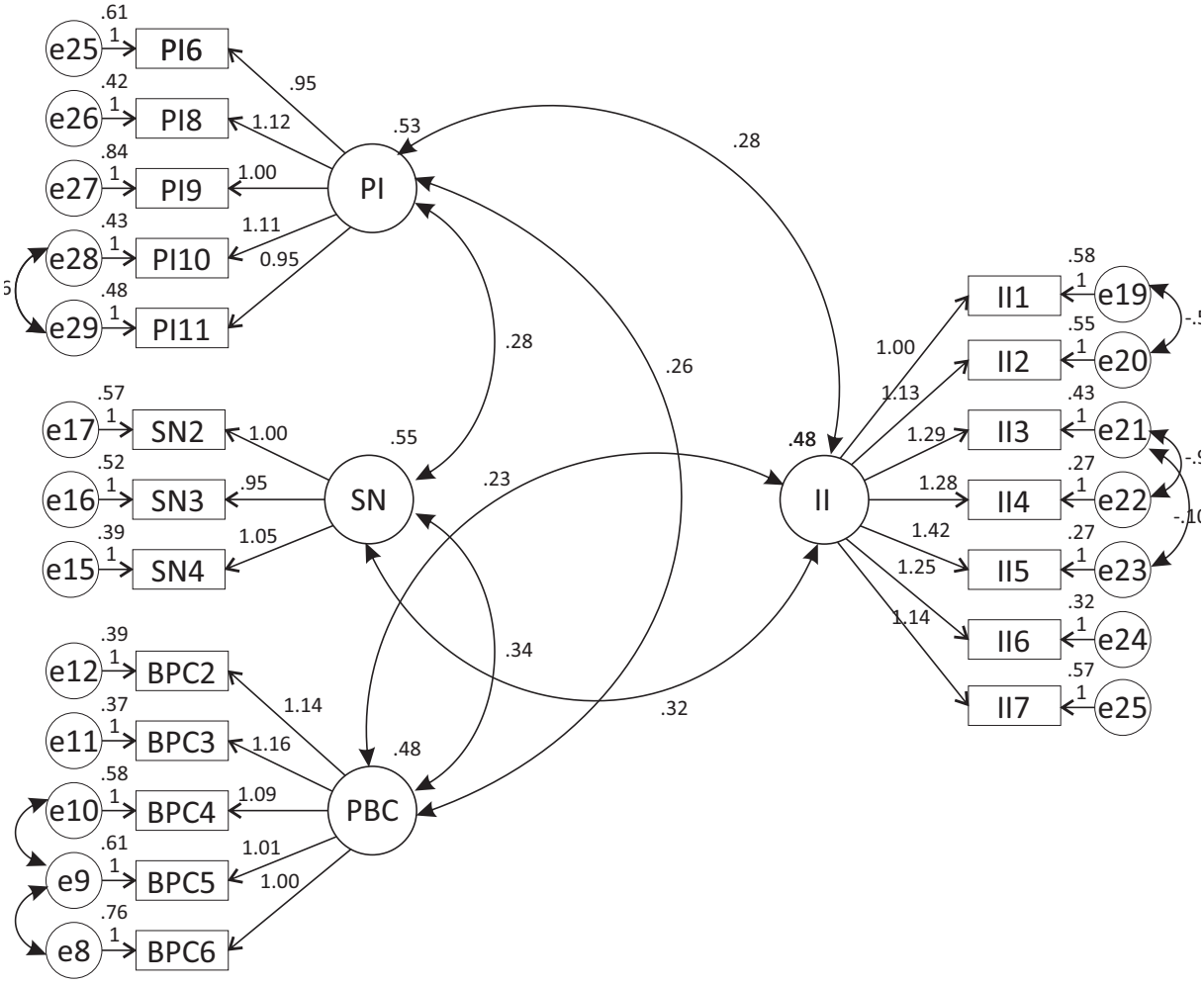

Figure 1. Measurement model

Furthermore, the results revealed that perceived behavioral control does not have a significant impact on investment intention $(\beta = .61; p > .05)$. The value of $R^2 = 0.458$ shows that overall model explains 45% of the variation in the investment intention with product involvement, subjective norm and perceived behavioral control. Table 3 presents the results of the data analysis.

4. DISCUSSION

The current study aimed assess the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of the individual investor. The finding revealed that hypothesis H_1, which states that product involvement has a significant impact on investment intention, is supported by the collected data. Moreover, findings showed that H_2, which states that subjective norm has a significant impact on investment intention, is also supported. Meanwhile H_3, which states that perceived behavioral control will have a significant impact on the investment intentions of individual investor, also found support from the findings of the current study.

In this research, product involvement (H_1) has a significant influence on investment intentions of the individual investors. The results of the current study also supported with the previous studies such as Laroche et al. (2010), Lim (2013), Harrison (2016). In reference to this, the product involvement allows investors to get more information about the stocks and exhort positive impact on investment intention. The more the investor will be involved in the stocks, there will be more chances of increase in investment intentions.

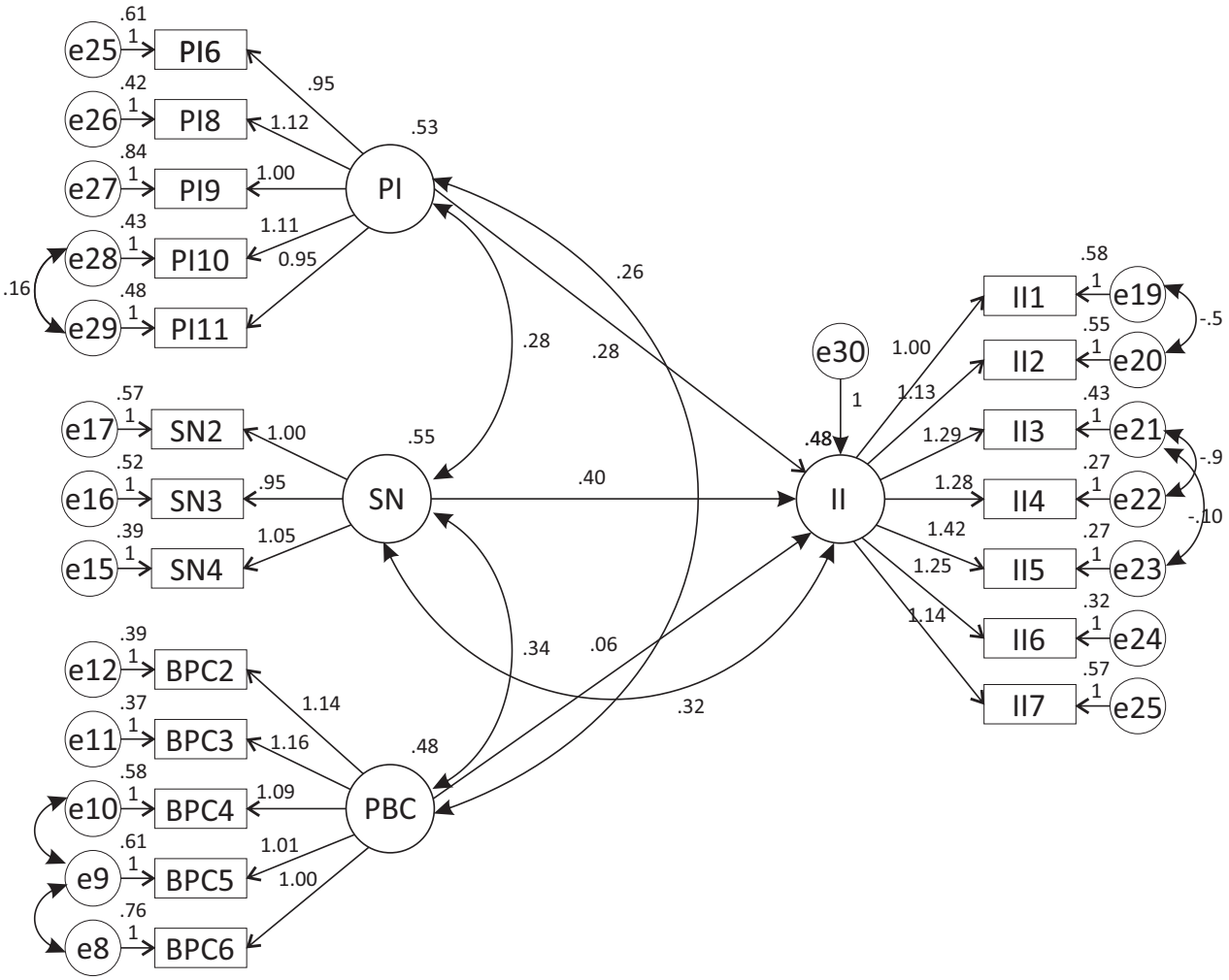

Figure 2. Structural model

Furthermore, subjective norm (H_2) has a significant impact on investment intentions of the individual investors. The current study also supported by previous findings of Alleyne and Broome (2011), Cuong and Jian (2014), Pascual-Ezama et al. (2014). As per Hofstede and Hofstede (2001), Pakistan is considered a collectivistic society. In the current study, the perception of the important people has a significant contribution in individual decision-making. If an individual perceives that important people will consider investment in stocks as approved and appreciate it, there are more chances that the individual will engage in the stock investments.

Moreover, perceived behavioral control (PBC) has a nonsignificant impact on investment intentions of the individual investors. The studies conducted Al-Swidi et al. (2014), Van Hooft and De Jong (2009) also supported the non-significant effect of PBC on intentions. In current research scenario, the individual investor mostly makes decisions on the basis of suggestion of people important to them over their own decision to invest. As Pakistan is a collective society (Hofstede & Hofstede, 2001), collectivism is more dominant over individualism. The non-significant effect of PBC could be the result of collectivism.

CONCLUSION

In this study, product involvement, subjective norm are significant factors that impact on the investment intentions of the individual investors. It can be concluded that the subjective norm acts as a more significant factor to impact the investment intention and subjective norm has also more significant influence as compared to product knowledge. It can be concluded that investment intention of the individual investors can be shaped with the help of increasing involvement and influence of friends, family and important people around the investors.

This study provides empirical evidence on the importance of product involvement in enhancing the intention of individual investors. Stock exchange authorities and financial advisor should focus on the creative investment plan to attract and create awareness among the individual investors. As the results indicate that higher involvement will lead to higher intention to invest in stocks. The family and friends can play an important role in forming the investment intentions as investors live in a collective society in Pakistan. Individual investors should be involved in the stock investment awareness and involvement process to guide their peers and family members on investment in stocks. This way of creating involvement and peer pressure can enhance the investment intentions among individuals.

REFERENCES

1. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.
2. Ajzen, I. (2002). Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality and Social Psychology Review, 6*(2), 107-122.
3. Ajzen, I. (2005). *Attitudes, personality, and behavior*. McGraw-Hill Education (UK).
4. Ajzen, I. (2006). Constructing a theory of planned behavior questionnaire.
5. Allen, M. W., Gupta, R., & Monnier, A. (2008). The interactive effect of cultural symbols and human values on taste evaluation. *Journal of Consumer Research, 35*(2), 294-308. Retrieved from http://www.jstor.org/stable/10.1086/590319?seq=1#page_scan_tab_contents
6. Alleyne, P., & Broome, T. (2011). Using the Theory of Planned Behaviour and Risk Propensity to Measure Investment Intentions among. *Journal of Eastem Caribbean Studies, 36*(1), 1-20. Retrieved from https://goo.gl/MFwyCK
7. Al-Swidi, A., Mohammed RafiulHuque, S., Haroon Hafeez, M., & Noor MohdShariff, M. (2014). The role of subjective norms in theory of planned behavior in the context of organic food consumption. *British Food Journal, 116*(10), 1561-1580.
8. Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin, 103*(3), 411-423.
9. Ang, J., Chua, A., & Jiang, D. (2010). Is A better than B? How affect influences the marketing and pricing of financial securities. *Financial Analysts Journal, 66*(6), 40-54. https://doi.org/10.2469/faj.v66.n6.5
10. Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology, 40*(4), 471-499.
11. Aspara, J. (2013). The role of product and brand perceptions in stock investing: Effects on investment considerations, optimism and confidence. *Journal of Behavioral Finance, 14*(3), 195-212. https://doi.org/10.1080/15427560.2013.819803
12. Aspara, J., & Tikkanen, H. (2008). Interactions of individuals' company-related attitudes and their buying of companies' stocks and products. *Journal of Behavioral Finance, 9*(2), 85-94.
13. Aspara, J., Olkkonen, R., Tikkanen, H., Moisander, J., & Parvinen, P. (2008). A theory of affective self-affinity: Definitions and application to a company and its business. *Academy of Marketing Science Review, 1*.
14. Baghdadabad, M. R. T., Tanha, F. H., & Halid, N. (2011). A study on small investors' behavior in choosing stock case study: Kuala-Lumpur stock market. *African Journal of Business Management, 5*(27), 11082-11092.
15. Bei, L. T., & Widdows, R. (1999). Product knowledge and product involvement as moderators of the effects of information on purchase decisions: A case study using the perfect information frontier approach. *Journal of Consumer Affairs, 33*(1), 165-186.
16. Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of personality and social psychology, 39*(5), 752-766.
17. Chakravarti, A., & Janiszewski, C. (2003). The influence of macro-

level motives on consideration set composition in novel purchase situations. *Journal of Consumer Research, 30*(2), 244-258.

18. Chandrashekaran, R., & Grewal, D. (2003). Assimilation of advertised reference prices: the moderating role of involvement. *Journal of Retailing, 79*(1), 53-62.
19. Chung, H., & Zhao, X. (2003). Humour effect on memory and attitude: moderating role of product involvement. *International Journal of Advertising, 22*(1), 117-144.
20. Clarke, K., & Belk, R. W. (1979). The effects of product involvement and task definition on anticipated consumer effort. *ACR North American Advances*.
21. Cole, S. A., Paulson, A. L., & Shastry, G. K. (2012). *Smart money: The effect of education on financial behavior* (Harvard Business School Finance Working Paper No. 09-071). http://dx.doi.org/10.2139/ssrn.1317298
22. Cuong, P. K., & Jian, Z. (2014). Factors influencing individual investors' behavior: An empirical study of the Vietnamese stock market. *American Journal of Business and Management, 3*(2), 77-94. https://doi.org/10.11634/216796061706527
23. Dey, D. K., Chauhan, Y. K., & Chakraborti, R. (2015). Does advertising strategy matter in influencing mutual fund purchase? *Journal of Financial Services Marketing, 20*(1), 23-33. Retrieved from https://link.springer.com/article/10.1057/fsm.2014.29
24. East, R. (1993). Investment decisions and the theory of planned behaviour. *Journal of Economic Psychology, 14*(2), 337-375.
25. Eurosif. (2012). *HNWIs & Sustainable Investment 2012.* Brussels, Belgium: Eurosif. Retrieved from http://www.eurosif.org
26. Fishbein, M., & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. Taylor & Francis.
27. Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research, 18*(3), 382-388.
28. Fu, J. R., Farn, C. K., & Chao, W. P. (2006). Acceptance of electronic tax filing: A study of taxpayer intentions. *Information & Management, 43*(1), 109-126.
29. Gopi, M., & Ramayah, T. (2007). Applicability of theory of planned behavior in predicting intention to trade online: Some evidence from a developing country. *International Journal of Emerging Markets, 2*(4), 348-360.
30. Grinblatt, M., Keloharju, M., & Linnainmaa, J. (2011). IQ and stock market participation. *The Journal of Finance, 66*(6), 2121-2164.
31. Guiso, L., & Jappelli, T. (2005). Awareness and stock market participation. *Review of Finance, 9*(4), 537-567.
32. Guiso, L., & Sodini, P. (2013). Household finance: an emerging field, in Constandinides. In G. Harris, M., & Stulz, R. (Eds.), *Handbook of the Economics of Finance* (pp. 1397-1532). Oxford: Elsevier Science.
33. Ham, M., Jeger, M., & FrajmanIvković, A. (2015). The role of subjective norms in forming the intention to purchase green food. *Economic Research-EkonomskaIstraživanja, 28*(1), 738-748. https://doi.org/10.1080/1331677X.2015.1083875
34. Hamid, S. A. (2014). *Tax compliance behaviour of tax agents: a comparative study of Malaysia and New Zealand* (Unpublished doctoral dissertation). University of Canterbury, New Zealand.
35. Harrison, T. (Ed.). (2016). *Financial Literacy and the Limits of Financial Decision-Making*. Springer.
36. Hirschey, M., & Nofsinger, R. J. (2008). *Invesment; Analysis and behavioral*. New York, USA: McGraw-Hill Irwin.
37. Hofstede, G. H., & Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage.
38. Hong, H., Kubik, J. D., & Stein, J. C. (2004). Social interaction and stock-market participation. *The Journal of Finance, 59*(1), 137-163.
39. Huhmann, B. A., & Bhattacharyya, N. (2005). Does mutual fund advertising provide necessary investment information? *International Journal of Bank Marketing, 23*(4), 296-316.
40. Iqbal, S., Hussain, N., Latif, M., & Aslam, S. (2013). Investor type and financial market anomalies: A comparison of individual, institutional and foreign investors and role of their behaviors in investing decisions. *Middle-East Journal of Scientific Research, 17*(11), 1591-1596. Retrieved from https://www.idosi.org/mejsr/mejsr17(11)13/16.pdf
41. Knabe, A. P. (2012). *Applying Ajzen's theory of planned behavior to a study of online course adoption in public relations education* (Unpublished doctoral dissertation). Marquette University, USA.
42. Kozup, J., Howlett, E., & Pagano, M. (2008). The effects of summary information on consumer perceptions of mutual fund characteristics. *Journal of Consumer Affairs, 42*(1), 37-59.
43. Laroche, M., Vinhal Nepomuceno, M., & Richard, M. O. (2010). How do involvement and product knowledge affect the relationship between intangibility and perceived risk for brands and product categories? *Journal of Consumer Marketing, 27*(3), 197-210.
44. Laurent, G., & Kapferer, J. N. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research, 22*(1), 41-53.
45. Lim, K. L. (2013). *Investment Intentions: A Consumer Behaviour Framework* (Unpublished doctoral dissertation). The University of Western Australia, Perth. Retrieved from http://research-repository.uwa.edu.au/en/publications/investment-intentions-a-consumer-behaviour-

framework(e7410b9e-46a6-46e9-8a4b-6d7f4721d8a5).html

46. Lim, K. L., Soutar, G. N., & Lee, J. A. (2013). Factors affecting investment intentions: A consumer behaviour perspective. *Journal of Financial Services Marketing, 18*(4), 301-315. Retrieved from https://link.springer.com/article/10.1057/fsm.2013.23

47. MacGregor, D. G., Slovic, P., Dreman, D., & Berry, M. (2000). Imagery, affect, and financial judgment. *The Journal of Psychology and Financial Markets, 1*(2), 104-110.

48. Mahastanti, L. A., & Hariady, E. (2014). Determining the factors which affect the stock investment decisions of potential female investors in Indonesia. *International Journal of Process Management and Benchmarking, 4*(2), 186-197. https://doi.org/10.1504/IJPMB.2014.060407

49. Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research, 2*(3), 173-191.

50. Mishra, S. K., & Kumar, M. (2011). How Product Importance Perception, Need for Cognition and Enduring Involvement Influence Investors' Knowledge of Investment Products? *Journal of Modern Accounting and Auditing, 7*(9), 920-933.

51. Paetzold, F., & Busch, T. (2014). Unleashing the powerful few: Sustainable investing behaviour of wealthy private investors. *Organization & Environment, 27*(4), 347-367. https://doi.org/10.5167/uzh-119592

52. Pascual-Ezama, D., Scandroglio, B., & Gil-Gomez de Liaño, B. (2014). Can we predict individual investors' behavior in stock markets? A psychological approach. *Universitas Psychologica, 13*(1), 25-35.

53. Petty, R. E., Cacioppo, J. T., & Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of personality and social psychology, 41*(5), 847.

54. Pohja, T. L. (2009). Searching for the entrepreneur–The role of social norms among entrepreneurs. In *4th EDP Workshop* (pp. 2-3).

55. Richins, M. L., & Bloch, P. H. (1986). After the new wears off: The temporal context of product involvement. *Journal of Consumer Research, 13*(2), 280-285.

56. Schmidt, N. (2011). *What drives investments into mutual funds? Applying the theory of planned behaviour to individuals' willingness and intention to purchase mutual funds.* Paper presented at The 1st European Retail Investment Conference, Germany. Retrieved from https://www.retailinvestmentconference.org/files/eric_submission_full_5_schmidt_v0.pdf

57. Shanmugham, R., & Ramya, K. (2012). Impact of Social Factors on Individual Investors' Trading Behaviour. *Procedia Economics and Finance, 2,* 237-246.

58. Shefrin, H. (2002). *Beyond greed and fear: Understanding behavioral finance and the psychology of investing*. Oxford University Press on Demand.

59. Shefrin, H., & Statman, M. (2000). Behavioral portfolio theory. *Journal of Financial and Quantitative Analysis, 35*(2), 127-151.

60. Shehryar, O., & Hunt, D. M. (2005). Buyer behavior and procedural fairness in pricing: exploring the moderating role of product familiarity. *Journal of Product & Brand Management, 14*(4), 271-276.

61. Shih, Y. Y., & Fang, K. (2004). The use of a decomposed theory of planned behavior to study Internet banking in Taiwan. *Internet Research, 14*(3), 213-223.

62. Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, financial literacy, and stock market participation. *International Journal of Bank Marketing, 35*(5), 818-841. Retrieved from http://www.emeraldinsight.com/doi/abs/10.1108/IJBM-01-2016-0012

63. Sommer, L. (2011). The theory of planned behaviour and the impact of past behaviour. *The International Business & Economics Research Journal, 10*(1), 91-110.

64. Statman, M., Fisher, K. L., & Anginer, D. (2008). Affect in a behavioral asset-pricing model. *Financial Analysts Journal, 64*(2), 20-29.

65. Sultana, S. T. (2010). An empirical study of Indian individual investors' behavior. *Global Journal of Finance and Management, 2*(1), 19-33.

66. Tai, Y. M., & Ku, Y. C. (2013). Will stock investors use mobile stock trading? A benefit-risk assessment based on a modified UTAUT model. *Journal of Electronic Commerce Research, 14*(1), 67-84. Retrieved from http://www.jecr.org/node/20

67. Talha, N. U. M., Ali, I., & Waheed, M. S. (2012). The influence of stock attributes on individual equity investor's behavior. *Actual Problems of Economics, 6,* 467-474.

68. Traylor, M. B., & Joseph, W. B. (1984). Measuring consumer involvement in products: developing a general scale. *Psychology & Marketing, 1*(2), 65-77.

69. Van Hooft, E. A., & De Jong, M. (2009). Predicting job seeking for temporary employment using the theory of planned behaviour: The moderating role of individualism and collectivism. *Journal of Occupational and Organizational Psychology, 82*(2), 295-316.

70. Yzer, M. (2012). Perceived behavioral control in reasoned action theory a dual-aspect interpretation. *The Annals of the American Academy of Political and Social Science, 640*(1), 101-117. Retrieved from https://experts.umn.edu/en/publications/perceived-behavioral-control-in-reasoned-action-theory-a-dual-asp

71. Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research, 12*(3), 341-352.