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THE SAVING BEHAVIOUR OF POMAKS IN BULGARIA: A PATH ANALYSIS APPROACH

In the region of Smolyan in Bulgaria and specifically in the cities of Zlatograd, Madan, Rudozem and Velingrad, the saving behaviour appears to be gaining more importance for Pomak households. Based on the Theory of Planned Behaviour, path analysis was applied to explore the factors that determine the intention of Pomak households to enhance their saving behaviour. The strongest influence was exerted by attitudes followed by subjective norms. Saving motives of households showed that those had the most significant influence on the intention towards saving. As regards the perceived behavioural control factor, the results indicated a direct positive effect on final saving behaviour, but a non-significant one on the intention to save. Furthermore, religiosity emerged as an important factor that affects the intention towards saving.

JEL: D10; D14

1. Introduction

The Republic of Bulgaria is situated on the eastern Balkan Peninsula of Southern-Eastern Europe, along the Black Sea. According to the Constitution of the Republic of Bulgaria, religions and religious practices in the country are free. The ethnic composition is: Bulgarian – 84.8%, Turkish – 8.8%, Roma – 4.9% and others (Based on the Population Census 2011 data) (NSI, 2017). Pomaks represent one of three major Muslim groups. According to the results of the 2001 census, there were 996,978 Muslims in Bulgaria, making up 12.2% of the Bulgarian population. Muslims were concentrated in the south-

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eastern and north-eastern regions of the country. Pomaks identified as a religious minority, primarily concentrated in the mountainous regions of the Rhodope mountains, with the Bulgarian language as their mother tongue, but whose religion and customs are Muslim (Poulton, 1991; Georgieva, 2001). This research aims at the development of the Pomak population and comprises any creative work undertaken on a systematic basis in order to increase the volume of financial knowledge, including the understanding of this minority group of its saving behaviour in order to devise new innovative financial policies. The emergence of the role of financial and social needs and the safeguarding of universal social rights for collective prosperity of the minority is crucial. Factors, such as social security, health, social care, employment and the labour market, education, immigration, financial policies and housing policy economy is a sector that contributes significantly to creating jobs, sustainable development and a fairer distribution of income and wealth to this population group in the area of Bulgarian Thrace. Specifically, it exists limited knowledge about how this minority group can compare the saving behaviour and tendency for it.

The socioeconomic situation in the region of Bulgarian Thrace is characterized, on the one hand, by the presence of favourable conditions for economic growth (natural resources, qualified and experienced workforce), and on the other, by serious problems (Lozanova et al., 2005), which resulted from the socialist regime's handling of the sectors of infrastructure and environmental protection. Other issues emerged as a result of a slow and painful transition towards a market economy, such as sluggish and non-effective privatization, closure of enterprises without the necessary social measures for providing alternative employment to laid-off workers. Low purchasing prices of agricultural products (including tobacco), dumping import of agricultural products from the neighbouring countries and low consumption power of the population and of underdeveloped regional markets (Lozanova et al., 2005) aggravated the already dismal situation. The combination of the traditional underdevelopment in the region (especially in the mountainous and border villages) with the rising unemployment (during the first years of the transition, in some villages over 90% of residents were left without work) resulted in the sharp impoverishment of the population (Lozanova et al., 2005). An imbalance between the demand of workforce and their lack of specialization was highly observed. A large part of the population (mostly the men) was forced to seek employment outside the region. The majority of those managed to find employment as seasonal workers in the large cities of Bulgaria, or even Spain, Portugal, Germany, Belgium and Holland (Lozanova et al., 2005). Minorities may also find it more difficult to access loans from banks and other financial institutions than non-minorities because loan officers as typical humans prefer to consider applications based on familiar references (Bewaji et al., 2015). Also, minority entrepreneurs may fear being rejected by financial institutions and thus are less likely to apply for loans. Since a loan manager in a bank sees fewer minority members applying for loans, he or she has less experience to successfully judge the potential viability of the individual. Due to the lack of interaction and the avoidance of uncertainty, a loan manager will be very likely to make a decision against giving loans to minority entrepreneurs. Sometimes minorities simply face prejudice based on their ethnic background in terms of the public's expectation of their ventures (Bewaji et al., 2015). Pomaks deliberately isolated themselves from the majority; they limited participate in the migration flows from the village-to-city in the industrialization period, which contributed to the preservation of traditional (pre-industrial)

and specific characteristics of their culture (Brunnbauer, 1999; Georgieva, 2001). At the same time, an opposite trend existed as well, because especially the young generation influenced by the secular education, wanted to detach from the religious conservatism and to establish closer contacts with the majority. Despite the existence of such trends, the beginning of the transition period found the Pomaks almost totally isolated, and politically, socially and economically divided (Eminov, 2007; Todorova, 1998). Pomaks were divided in two 'ethclasses': the Muslim industrial workers in the villages and the atheistic or secular intellectuals of the towns, that Pomaks were deeply religious but had not built up knowledge of their religion, or that they did not even profess the Sunni Orthodoxy, but traditional or popular Islam (Karagiannis, 1997). These impressions mainly resulted from the lack of serious research into the Muslim communities in Bulgaria (Gradeva, 1998), which opened a possibility of applying over-simplified definitions both to the community and its religiousness that their culture is Islamic. There were no signs in the 1990s of an economic uplift or sustainable revival of the local economy in the Rhodopes. The structural reform made things worse because most of the mining and processing enterprises in the south were closed down, thus increasing the already high levels of unemployment among Turks and Pomaks. The process of privatization of state enterprises has been very slow and the development of private businesses negligible. A slight improvement was observed only in those municipalities where the revival of enterprises and interest towards private businesses occurred. More often, however, there was a lack of initiative, information and a clear strategy for starting a private business. Local people viewed the private initiative as a survival strategy, not as means for increasing revenues. They obviously preferred small businesses with minimum investment risk – mostly trade ((Lozanova et al., 2005).

According to the Law on Regional Development (State Gazette, 2004) Bulgaria was divided into six planning regions, of which the fifth (South Central Region – SCR) included districts of Plovdiv, Kardzhali, Haskovo, Pazardzhik, Smolyan and Stara Zagora. In the project, only the two border districts will be examined – Smolian district (SD) and Pazardzhik district (PD). The present study explores the factors that influence the intention towards saving and the final saving behaviour of Pomak households. The Theory of Planned Behaviour (Ajzen, 1991) supplied the theoretical framework for the study. Consistent with the TPB, the research focused on attitudes, subjective norms, and perceived behavioural control in relation to the behavioural intention on the saving behaviour. The method of path analysis was utilized with R statistical language (R Core Team, 2013) and was applied to 400 participants, an adequate sample size.

2. Analytical Framework

The Theory of planned behaviour (TPB) is an extension of Fishbein and Ajzen's theory of reasoned action that includes measures of control belief and perceived behavioural control to deal with behaviours over which people has incomplete volitional control (Ajzen, 1991, 2002; Armitage & Conner, 2001; Conner & Armitage, 1998). The TPB further proposes that attitude, subjective norm, and PBC are determinants of behavioural intention, which subsequently influences behaviour. These three determinants are influenced by three different antecedents, namely behavioural beliefs, normative beliefs, and control beliefs

respectively, which together reflect the underlying cognitive structure (Ajzen, 1991, 2002; Armitage & Conner, 2001). The relative importance of these three determinants is expected to vary across behaviours and situations (Ajzen, 1991). The Theory of Planned Behaviour (TPB) predicts an individual's intention to engage in a behaviour at a specific time and place (Ajzen, 2002). The theory was intended to explain all behaviours with which people have the ability to exert self-control. The TPB has constantly been applied in the social psychology literature and has been applied to investigations in the field of credit counselling, personal finance, private money management, tourism sector both domestically and internationally (Ajzen, 2002; Bobek et al., 2007; Kidwell & Turrissi, 2004; Quintal et al., 2010; Ramayah et al., 2009; Rutherford & DeVaney, 2009; Xiao & Wu, 2008; Zhang et al., 2018). The use of TPB based models on financial and saving behaviour displayed positive results, for instance, with a 51% financial budget leading to 72% retirement saving of the variance in intention (Croy et al., 2012; Kidwell & Turrissi, 2004). According to Ajzen (2002), attitudes refer to the degree to which a person has a favourable or an unfavourable evaluation of the behaviour of interest and also entails a consideration of the outcomes of behaviour performance. Subjective norms refer to the belief about whether most people approve or disapprove the behaviour (Ajzen, 2002). It relates to a person's belief about whether peers, and people of importance to the person, think he or she should engage in the behaviour. Perceived behavioural control refers to a person's perception of the ease or difficulty of performing the behaviour of interest, and varies across situations and actions, which results in a person having varying perceptions of behavioural control depending on the situation (Ajzen, 2002). Behavioural intention refers to the motivational factors that influence a given behaviour where the stronger the intention to perform the behaviour, the more likely the behaviour will be performed (Ajzen, 2002).

TPB provides a framework to explore the underlying beliefs that affect one's financial behaviours. Thus, the TPB is helpful in investigating and designing strategies to help people to adopt positive financial behaviours. Several studies used the TPB to investigate a range of financial behaviours. Rutherford and DeVaney (2009) studied the role of the antecedents of a key concept of the TPB, behavioural intention (BI), to understand the "convenience use" of credit cards. Findings suggested that convenience users of credit cards were likely to possess an unfavorable ATT with regard to the use of credit cards and were influenced less by SN with regard to the use of credit cards (Rutherford & DeVaney, 2009). These authors also found that perceived behavioural control (PBC) positively impacted the convenience use of credit cards. Interestingly, however, Rutherford and DeVaney (2009) did not address behavioural intention (BI) in terms of its influence on the convenience use of credit cards. Rather, the foci in this study were the antecedents thereof: ATT, SN, and PBC. Ramayah, Yusoff, Jamaludin and Ibrahim (2009) used the TPB to predict internet tax filing intentions (e-filing). The study showed that PCB was the strongest predictor of intentions to file taxes via the internet, followed by the next strongest predictor, ATT. The results indicated that SN demonstrated a minor influence on tax filing via the internet. However, the study participants' PBC over the situation and ATT toward e-filings were found to be essential for a strong BI to file taxes via the internet. Xiao and Wu (2008) utilized the TPB identified psychological factors that supported the completion of debt management plans (DMPs). Participants in this study indicated higher levels of BI toward completing a DMP when ATT and PBC reflected higher levels. The study also showed that

BI had a direct effect on the completion of DMPs. PBC (an antecedent of BI), also had a direct effect on the completion of DMPs. A study using the TPB reported by Bobek, Hatfield & Wentzel (2007) explored why taxpayers prefer refunds. This research showed that ATT and SN influenced taxpayer withholding decisions. However, the results did not support the notion that PBC was associated with making changes in one's withholding. In the results of this study it appeared that the perceived emotional benefit of receiving a tax refund was a more powerful motive than gaining investment income.

The TPB's PBC is the individual's perception of the extent to which the performance of the behaviour is easy or difficult, and reflects both past experiences as well as anticipated impediments and obstacles (Ajzen, 1991). It refers to the amount of volitional control individuals perceive over the behaviour (Armitage, Conner, 2001) and can be seen as interchangeable with self-efficacy (see Ajzen, 1991; Conner, Armitage, 1998), although perceived controllability might constitute PBC together with perceived self-efficacy (see Ajzen, 2002; Conner, Armitage, 1998). The importance of PBC is well evidenced in prior studies (Posthuma, Dworkin, 2000; Lim, Dubinsky, 2005; Kang et al., 2006). Because PBC is related to the individual condition, such as ability, time, money, and resources, it is expected to vary little by culture and country (Abrahamse, Steg, 2009).

The Theory of Planned Behaviour (TPB) (see Ajzen, 1991) is frequently used to explain such patterns and better understand how individuals make behavioural decisions (Xiao, 2008). From the theoretical perspectives, this study highlights the importance of TPB in determining individual's saving behaviour. The proposed framework model of this study provides emphasis upon how the saving behaviour is affected by the elements of TPB model. In order to Pomak households' saving behaviour, it is important to figure out on what their attitudes and beliefs towards saving and also consider how social pressure may affect their saving decision. The theory of planned behaviour can help predict and explain saving intentions and behaviour and can accommodate decisions involving savings (Ajzen, 2015).

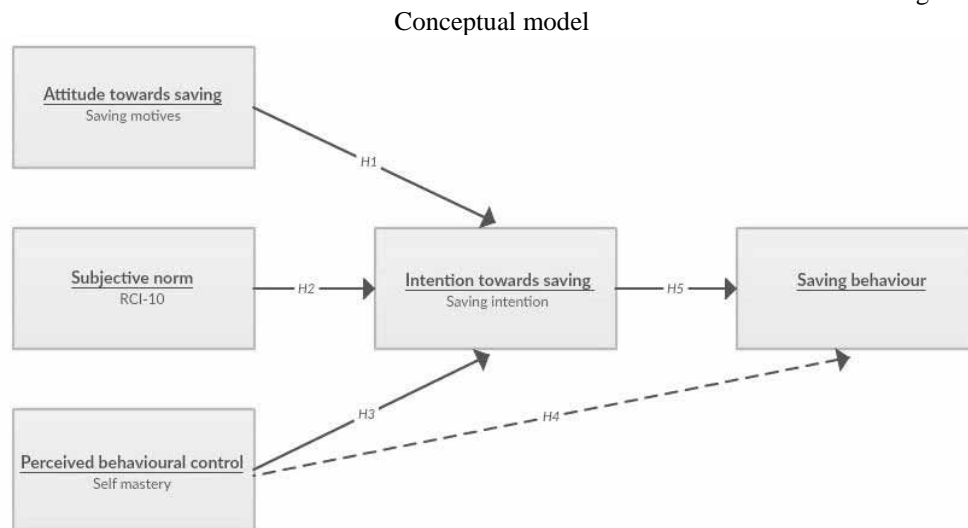
Household saving represents a decision to increase asset accumulation or consume less current income in order to meet financial goals (Chang, 1994). The analysis of household savings provides a better understanding of their saving behaviour, differences among household saving rates, factors influencing the level of household saving, trends in the household saving rate, and a variety of other issues related to saving (Fisher, Montalto, 2010). The concept of saving has received a considerable amount of theoretical and empirical consideration in the economic literature (Canova et al., 2005). According to previous studies on saving behaviour, those households in which spending was less than income were defined as savers, excluding spending on investments or durables such as a home or automobile (Fisher, Montalto, 2010; Hogarth et al., 2005; Rha et al., 2006; Yuh, Hann, 2010). Particularly, minority households are more likely to make mistakes because they earn less and are less educated than the majority of households (Campbell, 2006). The availability of such resources for minority households may considerably improve their financial status or economic well-being (Forry, 2009).

Attitude refers to the degree to which a person has a favourable or unfavourable evaluation of the behaviour of interest. It entails a consideration of the outcomes of performing the behaviour. Many studies have found the significant effect of attitudes on intention (Ing-

Long & Jian-Liang, 2005; Ramayah et al., 2003; 2009; Rhodes & Courneya, 2003; Taylor & Todd, 1995) and that a behavioural intention reflects a person's decision to perform the behaviour (Ajzen, 1991). Subjective norms refer to the belief about whether most people approve or disapprove of the behaviour. It relates to a person's beliefs about whether peers and people of importance to the person think he or she should engage in the behaviour. Several studies have shown no significant relationship between SN and intention (Chau & Hu, 2001; Lewis et al., 2003) whereas other studies depict the opposing outcome (Chan & Lu, 2004; Jen-Ruei et al., 2006; Ramayah et al., 2004; Taylor & Todd, 1995). Perceived behavioural control refers to a person's perception of the ease or difficulty of performing the behaviour of interest. Perceived behavioural control varies across situations and actions, which results in a person having varying perceptions of behavioural control depending on the situation. Perceived behavioural control has an important contribution in predicting behavioural intention and have a greater influence than attitude (Hsu & Huang, 2012). As the PBC of an individual gets more positive, the behavioural intention to participate also transforms as a more positive (Kuo & Young, 2008). Intention refers to the motivational factors that influence a given behaviour where the stronger the intention to perform the behaviour, the more likely the behaviour will be performed. It is supposed to directly affect a given behaviour because it is an indication of how willing individuals are to perform the action (Ajzen, 1991; Armitage & Conner, 2001). According to the TPB, the amount of volitional control specifies, to what degree intentions are transformed into behaviour (Ajzen, 1991; Armitage & Conner, 2001).

In the context of the present study, the conceptual TPB model (Ajzen, 1991; Satsios, Hadjidakis, 2018) is presented in Figure 1.

Figure 1



Source: Satsios & Hadjidakis, 2018.

Savings goals encouraged participants to think about frame savings for a particular purpose, such as education in the future or a security deposit on an apartment (Tversky, Kahneman, 1981; Zelizer, 1989). DeVaney et al. (2007) identified the characteristics of households that lead to a shift from lower to higher saving motives and found that the hierarchical structure consisted of physiological (basic), safety, security, love/societal, esteem/luxuries, and self-actualization motives. A number of theoretical and simulation studies have analysed saving for selected motives, such as retirement (Modigliani, Brumberg, 1954), precautionary reasons (Leland, 1968), and saving for the purchase of a house (Artle, Varaiya, 1978; Hayashi et al., 1988). However, empirical studies of saving for specific motives have been few (Horioka, Watanabe, 1997). Moreover, psychological factors may have influenced households more during normal times, that is, if households are uncertain about their future income, they tend to save more to accumulate assets to their target level. Individuals are expected to have several reasons for saving and place their money in various accounts, rather than simply wanting to save and placing all savings in a single account. At the individual level, savings help households' smooth consumption and finance productive investments in human and business capital. At the macroeconomic level, saving rates are strongly predictive of future economic growth. Saving incentives make saving attractive and help increase accumulations.

In addition, religion plays a significant role in financial service. Noland (2005) maintains that beliefs and religion can be very harmful to the economy, at both microeconomic and macroeconomic levels. The degree of religiosity seems to be a key determinant of the Muslim consumer on saving attitude and behaviour. In the financial literature (Souiden & Rani, 2015), among all the common variables that come into play when choosing a bank, religious beliefs or religiosity have been the most studied factors in the context of Islamic banking. Religiosity offered by Johnson et al. (2001) suggests that it is strongly related to attitude, in line with Fishbein & Ajzen (1975, p. 11), who write that attitude is "*the amount of affect for or against some object*". They maintain that beliefs represent the information an individual has about an object. A person's beliefs are likely to be strongly related to his/her religion, either by direct effect (via sacred texts) or by indirect effect (because of the culture of the individual, which is influenced by religion). Thus, religion and attitudes are strongly correlated.

3. Method

3.1. Sample & Procedure

The survey was given to 400 respondents in Bulgaria in the region and the city of Smolyan and specifically in the cities of Zlatograd, Madan, Rudozem and Velingrand. The self-completion questionnaire was administered face to face in several physical locations in this region and the aim of the research was analysed to the respondents. The sample included 221 females and 179 males, with a mean age of 38.4 years (SD = 13.9). The households in the survey were selected through the snowball sampling technique. In each case, the questionnaire was completed by one representative from the household. This person was involved in the decision-making process of the household and served as a proxy for the

whole household. Analyses were carried out using IBM SPSS 24 and R statistical language (R Core Team 2013) equipped with lavaan package (Rosseel, 2012).

3.2. Measures

All items intended to measure the variables in this research were adopted from previously validated instruments (Table 1). The respondents were asked questions from academic scales (Table 1) about their saving behaviour, in order to determine the factors that are crucial to and influence their financial life.

Table 1

List of items and their sources

Constructs	Items	Abbrev.
Attitude towards Saving (adapted from DeVaney et al., 2007; Saving Motives hierarchy)	Paying debts	ATT1
	Retirement	ATT2
	Education / love / family	ATT3
	Future uncertainties / emergency / safety	ATT4
Subjective Norm (adapted from Worthington et al. 2003; 2012; RCI-10 scale)	I make financial contributions to my religious organization.	SN1
	I spend time trying to grow in understanding of my faith.	SN2
	Religion is especially important to me because it answers many questions about the meaning of life.	SN3
	My religious beliefs lie behind my whole approach to life.	SN4
Perceived Behavioural Control (adapted from Pearlin & Schooler's, 1978; Self Mastery scale)	There is really no way I can solve some of the problems I have.	PBC1
	Sometimes I feel that I'm being pushed around in life.	PBC2
	I have little control over the things that happen to me.	PBC3
	I often feel helpless in dealing with the problems of life.	PBC4
	There is little I can do to change many of the important things in my life.	PBC5
Intention towards Saving (adapted from Warneryd, 1996a; 1996b; Saving Intention scale)	I always try to pick saving schemes that yield high profits.	INT1
	It is important always to save as much money as possible.	INT2
	It is important to have some money left at the end of the month.	INT3
	Saving should be encouraged in today's society.	INT4

3.3. Reliability

Cronbach's alpha was calculated for all the scales of the questionnaire (Table 2). For all academic scales that were used, the internal reliability was good or very good.

Table 2

Cronbach's alpha coefficients of survey

Scale	Pilot survey Cronbach's a (N=600)	N (Items)
ATT	.792	4
SN	.887	4
PBC	.835	5
INT	.815	4

Principal component analysis in the 17 items of the questionnaire suggested a four components solution explaining 65.8% of the total variance (Table 3). Thus, the desired structure was confirmed and the questionnaire was proved to be adequate for the purpose of the study.

Table 3

Rotated component matrix

	Component			
	SN	PBC	INT	ATT
I make financial contributions to my religious organization.	.699			
I spend time trying to grow in understanding of my faith.	.884			
Religion is especially important to me because it answers many questions about the meaning of life.	.887			
My religious beliefs lie behind my whole approach to life.	.895			
There is really no way I can solve some of the problems I have.		.778		
Sometimes I feel that I'm being pushed around in life.		.844		
I have little control over the things that happen to me.		.798		
I often feel helpless in dealing with the problems of life.		.773		
There is little I can do to change many of the important things in my life.		.684		
I always try to pick saving schemes that yield high profits.			.596	
It is important always to save as much money as possible.			.823	
It is important to have some money left at the end of the month.			.853	
Saving should be encouraged in today's society.			.793	
Paying debts				.741
Retirement				.787
Education/love/family				.776
Future uncertainties/emergency/safety				.691
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 4 iterations.				

3.4. Path Analysis

The hypothetical model was assumed to be the model suggested by the TPB theory (Figure 1). All 400 observations were used in order to estimate the coefficients. The model was converged after 49 iterations (Table 4). The model was statistically significant ($\chi^2(10)=252.9$, $p<0.001$). The model was well fitted to the data (CFI=0.974, TLI=0.871, RMSEA=0.089, 90% C.I. 0.033-0.155, SRMR=0.032, NFI=0.967, NNFI=0.871,

GFI=0.992, AGFI=0.939). The standardized regression coefficients for the Bulgarian sample are presented in Figure 2.

Table 4

First path model's parameters

	Estimate	95% C.I.		Std. Err	z-value	p	Std. lv*	Std. all**	R ²
		Lower	Upper						
INT									0.273
ATT	0.358	0.287	0.429	0.036	9.884	0.000	0.358	0.445	
SN	0.105	0.048	0.162	0.029	3.620	0.000	0.105	0.164	
PBC	-0.025	-0.106	0.056	0.041	-0.601	0.548	-0.025	-0.026	
SB									0.158
INT	0.419	0.318	0.520	0.052	8.124	0.000	0.419	0.373	
PBC	0.167	0.069	0.264	0.050	3.361	0.001	0.167	0.154	

Note: $\chi^2(10) = 252.9$, $p < 0.001$; RMSEA = 0.089, NFI = 0.967, CFI = 0.974, TLI = 0.871.

(*) Dependent Variables are standardized.

(**) Completely standardized solution (estimates of parameters if the variances of the observed and latent variables are unity).

The direct and indirect effects of the constructs on saving behaviour are presented in Table 5. Attitudes towards saving (ATT) had a significant positive direct effect on intention towards saving (INT) ($b_{std} = 0.445$, $b = 0.358$, 95% C.I. = 0.287 to 0.429, $p < 0.001$) and a significant positive indirect effect on saving behaviour (SB) ($b_{std} = 0.186$, $b = 0.168$, $p < 0.001$). Subjective norms (SN) had a significant positive direct effect on intention towards saving (INT) ($b_{std} = 0.164$, $b = 0.105$, 95% C.I. = 0.048 to 0.162, $p < 0.001$) and a non-significant indirect effect on saving behaviour (SB) ($p = 0.622$). On the other hand, intention (INT) had a significant positive direct effect on saving behaviour (SB) ($b_{std} = 0.373$, $b = 0.419$, 95% C.I. = 0.318 to 0.520, $p < 0.001$). Finally, perceived behavioural control (PBC) had a significant positive direct effect on saving behaviour (SB) ($b_{std} = 0.154$, $b = 0.167$, 95% C.I. = 0.069 to 0.264, $p = 0.001$), and a non-significant effect on intention towards saving (INT) ($p = 0.548$) and a non-significant indirect effect on saving behaviour (SB) ($p = 0.310$).

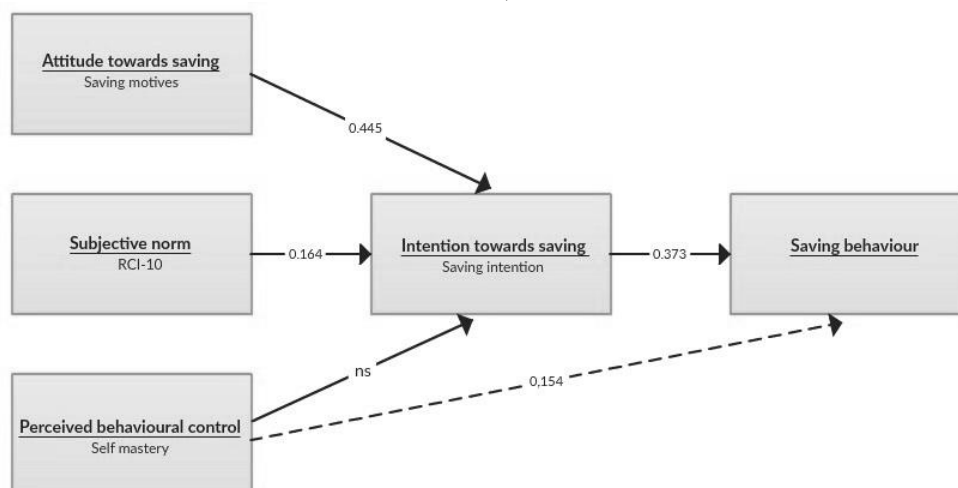
Table 5

Summary of the path model

Path/Effect	Direct effect	Indirect effect	Total effect	Greek sample Total Effect
ATT → INT	0.445		0.445	0.289
ATT → SB		0.186	0.186	0.036
SN → INT	0.164		0.164	0.346
SN → SB		ns	ns	0.044
PBC → INT	ns		ns	0.133
PBC → SB	0.154	ns	0.154	-0.068
INT → SB	0.373		0.373	0.126

ns=non-significant

Figure 2
Path analysis results on the effect of attitudes, subjective norms and perceived behavioural control on intention towards saving and saving behaviour (*standardized estimates*, $N = 400$)



4. Discussion

The study showed that attitudes have a significant and positive effect on the saving behaviour of the Bulgarian Pomak households, an effect that also emerged in Greek Pomak households (Satsios, Hadjidakis, 2018). In particular, individuals with higher positive attitudes were found to have a greater intention to save. This finding agrees with previous studies (Choo et al., 2004; Cwik et al., 2017; Fisher, Montalto, 2010; Lea et al., 1995; Warneryd, 1999; Webley, Nyhus, 2001), which support the TPB theory of attitudes as a predictor of intention towards saving. Thus, the attitudes towards saving through the saving motives are becoming increasingly important.

Subjective norms also emerged as a positive effect on intention towards saving for Bulgarian Pomaks, as the research of Satsios and Hadjidakis (2018) on Greek Pomak households has shown. Nevertheless, it had more than half the effect of intention compared to the attitudes towards saving, which had the largest effect in the Bulgarian sample. That finding is in contrast to the analogous findings of the Greek sample, where religiosity was found to have the strongest effect on intention towards saving (Satsios & Hadjidakis, 2018). Also, the subjective norms were found to be a significant predictor of intention in other academic researches, as well (Ajzen, Driver, 1992; Bock, Kim, 2002; Chan, Lu, 2004; Jen-Ruei et al., 2006; Kuo, Young, 2008; Taylor, Todd, 1995; Tsai, 2010). Religiosity prevails as an important factor, having a buffer effect on both the individual and the cultural level, influencing at the same time the relationship between financial life and psychological adjustment (Gebauer et al., 2013; Plouffe, Tremblay, 2017).

Concerning perceived behavioural control, the results indicate a non-significant effect on intention towards saving and a direct positive effect on saving behaviour, a finding that is in agreement with published articles concerning TPB (Albarracin et al., 2001; Ryu et al., 2003). In contrast, it differentiates from the former application of the TPB model on the Greek Pomak sample, where perceived behavioural control was found to have a negative effect on saving behaviour (Satsios & Hadjidakis, 2018). According to Xiao et al. (2006), some evidence shows that self-perceived financial behaviour performance is associated with self-reported positive financial behaviour.

In the current path model, the intention has a significant positive direct effect on saving behaviour (Ajzen, 1991; Armitage & Conner, 2001; Davis & Hustvedt, 2012; Hershey et al., 2008; Lusardi, 2008), an effect that was found to be larger than the corresponding effect in the Greek Pomak sample (Satsios & Hadjidakis, 2018). Thus, it is verified that in both Pomak communities, Bulgarian and Greek, the intention to save depicts an important process to final saving behaviour. Consequently, behavioural intention is verified to be a proxy measure of likely behaviour (e.g., Phillips & Jang, 2012; Sparks & Pan, 2009; Wang & Ritchie, 2013). In summary, most of the paths in the Bulgarian sample application of path analysis are of similar nature to the corresponding parts of the analogous model tested in a Greek Pomak sample (Satsios & Hadjidakis, 2018), a fact that proves the similarity of saving behaviour between the two Pomak communities and characterizes the TPB model as a reliable academic tool for modelling analogous financial behaviour.

4.1. Implications & Future suggestion

Both Pomak communities in Bulgaria and Greece have equal opportunities to succeed, irrespectively of their socioeconomic origins and backgrounds. Inclusive and equal quality education with lifelong learning possibilities requires investments in people and places so that equal opportunities for all and sustainable growth can be ensured. The course of financial policy action spans across aspects of well-being, such as health and education, aiming to improve the (environmental) quality of life and infrastructure, thus, creating sustainable cities. Setting up foundations for new jobs requires investments in both human and produced capital, for example, through vocational training and life-long-learning (encouraging girls' and women's participation) and effective investment policy frameworks (enabling the financial system to support the investments). Specifically, for practitioners in financial counselling and planning, the results can be used to better understand clients' goals and design more effective saving strategies for them. These results may also be useful in designing public policies to encourage an increase in household saving rates by emphasizing saving for more personal desires rather than just for precautionary or retirement saving purposes (Lee, Hanna, 2015). To meet goals for financial inclusion, practitioners and policymakers must address the distinct constraints affecting low-income households as they attempt to save, namely transaction costs, mistrust of financial institutions, regulatory barriers, information gaps, social constraints, and behavioural biases. The research focused on potential implications for savings programs and policies targeted toward low-income families and minorities in low-resource settings, also included to observe the effects of a higher saving incentive.

Using self-report information to examine savings and consumptions is common in other studies (Elliott et al., 2011; Karimli, 2014). A higher savings incentive only led to a higher frequency of deposits relative to receiving a lower savings incentive. In summary, when children and families in both intervention arms were offered opportunities to open incentivized savings accounts at formal financial institutions and provided supportive workshops and mentorship as complementary programmatic components, participants were subsequently more likely to report having money saved somewhere. Previous studies on saving behaviour, defined as savers, those households in which spending was less than income, excluding spending on investments or durables such as a home or automobile (Fisher, Montalto, 2010). Thus, researchers should investigate these factors more to explain this relationship for government programs for savings for the households. At the individual level, savings help households' smooth consumption and finance productive investments in human and business capital. At the macroeconomic level, savings rates are strongly predictive of future economic growth. It is recommended that more in-depth studies on household savings be conducted in order to address other problems, enlighten the general public, and push national and local governments to set policies and programs related to it. Future research can include other religious or ethnic groups, as well, in order to investigate and compare their saving behaviour.

4.2. Limitations

The majority of participants were Muslims. Many religious affiliations (particularly within Christianity) profess varied beliefs and teachings and therefore, religious affiliation is likely to be an influential factor in one's ability and desire in faith (Kidwell & Turrisi, 2004). Moreover, it was not able to further distinguish between the various ethnic groups within this subsample. Future research must confirm the cultural differences reported in this study for specific ethnic groups. Future research should be extended to include different levels of value and the culture of respondents, as in those of respondents from other countries (Teng et al., 2015).

References

- Ajzen, I. (1991). The theory of planned behaviour. – *Organizational behaviour and human decision processes*, 50, pp. 179-211.
- Ajzen, I. (2002). Perceived behavioural control, self-efficacy, locus of control, and the theory of planned behaviour. – *Journal of Applied Social Psychology*, 32(4), pp. 665-683.
- Ajzen, I. (2015). The theory of planned behaviour is alive and well, and not ready to retire: A commentary on Sniehotta, Pesseau, and Araújo-Soares. – *Health Psychology Review*, 9(2), pp. 131-137.
- Armitage, C. J., Conner, M. (2001). Efficacy of the Theory of Planned Behaviour: a meta-analytic review. – *The British Journal of Social Psychology*, 40(4), p 471-499.
- Artle, R., Varaiya, P. (1978). Life cycle consumption and homeownership. – *Journal of Economic Theory*, 18(1), pp. 38-58.
- Bewaji, T., Yang, Q., Han, Y. (2015). Funding accessibility for minority entrepreneurs: an empirical analysis. – *Journal of Small Business and Enterprise Development*, 22(4), pp. 716-733.

- Bobek, D. D., Hatfield, R. C., Wentzel, K. (2007). An investigation of why taxpayers prefer refunds: A theory of planning behaviour approach. – *Journal of the American Taxation Association*, 29(1), pp. 93-111.
- Brunnbauer, U. (1999). Diverging (Hi-)Stories: The Contested Identity of the Bulgarian Pomaks. – *Ethnologia Balkanica*, 3, pp. 35-50.
- Campbell, J. Y. (2006). Household Finance, Presidential Address to the American Finance Association. – *Journal of Finance*, (4), pp. 1553-1604.
- Chan, S. C., Lu, M. T. (2004). Understanding internet banking adoption and user behaviour: a Hong Kong perspective. – *Journal of Global Information Management*, 12(3), pp. 21-43.
- Chang Y. R. (1994). Saving behaviour of U. S. households in the 1980s: results from the 1983 and 1986 Survey of Consumer Finance. – *Financial Counseling and Planning*, 5, pp. 45-64.
- Conner, M., Armitage, C. J. (1998). Extending the Theory of Planned Behaviour: A Review and Avenues for Further Research. – *Journal of Applied Social Psychology*, 28(15), pp. 1429-1464.
- Croy, G., Gerrans, P., Speelman, C. (2012). Normative influence on retirement savings decisions: Do people care what employers and the government want?. – *Australian Journal of Psychology*, 64(2), pp. 83-91.
- Cwik, J. C., Till, B., Bieda, A., Blackwell, S. E., Walter, C., Teismann, T. (2017). Measuring attitudes towards suicide: Preliminary evaluation of an attitude towards suicide scale. – *Comprehensive Psychiatry*, Elsevier, 72, pp. 56-65.
- DeVaney, S. A., Anong, S. T., Whirl, S. E. (2007). Household savings motives. – *Journal of Consumer Affairs*, 41(1), pp. 174-186.
- Elliott, W., Choi, E.H., Destin, M., Kim, K.H. (2011). The age-old question, which comes first? A simultaneous test of children's savings and children's college-bound identity. – *Children and Youth Services Review*, 33, pp. 1101-1111.
- ELSTAT. (2017). Census 2011. Available at: http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A1602 [accessed 20/09/2019].
- Eminov, A. (2007). Social construction of identities: Pomaks in Bulgaria. – *Journal on ethnopolitics and minority issues in Europe*, 6(2), pp. 1-25.
- Fishbein, M., Ajzen, I. (1975). *Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research*. Addison-Wesley, Reading.
- Fisher P. J., Montalto, C. P. (2010). Effect of saving motives and horizon on saving behaviours. – *Journal of Economic Psychology*, 31(1), pp. 92-105.
- Forry, N. D. (2009). The impact of child care subsidies on low-income single parents: An examination of child care expenditures and family finances. – *Journal of Family and Economic Issues*, 30(1), pp. 43-54.
- Georgieva, T. (2001). Pomaks: Muslim Bulgarians. – *Islam and Christian-Muslim Relations*, 12(3), pp. 303-316.
- Gradeva, R., Ivanova, S. (1998). Vavedenie: izsledvane na istoriata i savremenoto sastoianie na miusiulmanskata kultura po balgarskite zemi. – In: Gradeva, R., Ivanova, S. (eds.). *Miusiulmanskata Kultura po Balgarskite Zemi*, Vol. 2, Sofia: IMIR, pp. 9-53.
- Hayashi, F., Ito, T., Slemrod, J. (1988). Housing finance imperfections, taxation, and private saving: A comparative simulation analysis of the United States and Japan. – *Journal of the Japanese and International Economics*, 2(3), pp. 215-238.
- Hogarth, J. M., Anguelov, C. E., Lee, J. (2005). Who Has a Bank Account? Exploring Changes over Time, 1989-2001. – *Journal of Family and Economic Issues*, 26(7), pp. 7-30.
- Horioka, C. Y., Watanabe, W. (1997). Why do people save? A micro-analysis of motives for household saving in Japan. – *Economic Journal*, 107(442), pp. 537-552.
- Hsu, C. H. C., Huang, S. (2012). An extension of the theory of planned behaviour model for tourists. – *Journal of Hospitality & Tourism Research*, 36(3), pp. 390-417.

- Ing-Long Akerlof, G., Kranton, R. (2000). Economics and identity. – *Quarterly Journal of Economics*, 115(3), pp. 715-753.
- Jen-Ruei, F., Cheng-Kiang, F., Wen-Pin, C. (2006). Acceptance of electronic tax filing: a study of taxpayer intentions. – *Information & Management*, 43, pp. 109-126.
- Johnson, B. R., Jang, S. J., Larson, D. B., Li, S. D. (2001). Does adolescent religious commitment matter? A reexamination of the effects of religiosity on delinquency. – *Journal of Research in Crime and Delinquency*, 38(1), pp. 22-43.
- Kang, H., Hahn, M., Fortin, D. R., Hyun, Y. J., Eom, Y. (2006). Effects of perceived behavioural control on the consumer usage intention of e-coupons. – *Psychology & Marketing*, 23(10), pp. 841-64.
- Karagiannis, E. (1997). Zur Ethnizität der Pomaken Bulgariens. Münster.
- Karimli, L., Ssewamala, F. M., Neilands, T. B. (2014). Poor families striving to save in matched children's savings accounts: Findings from a randomized experimental design in Uganda. – *Social Service Review*, 88, pp. 658-694.
- Kidwell, B., Turrissi, R. (2004). An examination of college student money management tendencies. – *Journal of Economic Psychology*, 25(5), pp. 601-616.
- Kuo, F.-Y., Young, M.-L. (2008). Predicting knowledge sharing practices through intention: A test of competing models. – *Computers in Human Behaviour*, 24, pp. 2697-2722.
- Lee, J. M., Hanna, S. D. (2015). Savings goals and saving behaviour from a perspective of Maslow's hierarchy of needs. – *Journal of Financial Counseling and Planning*, 26(2), pp. 129-147.
- Leland, H. (1968). Saving and uncertainty: The precautionary demand for saving. – *Quarterly Journal of Economics*, 82(3), pp. 465-473.
- Lim, H., Dubinsky, A. J. (2005). The theory of planned behaviour in e-commerce: making a case for interdependencies between salient beliefs. – *Psychology & Marketing*, 22(10), pp. 833-855.
- Lozanova, G., Alexiev, B., Nazarska, G., Troeva-Grigorova, E., Kyurkchieva, I. (2005). Regions, minorities and European policies: A state of the art report on Muslim Minorities (Turks and Pomaks) in Central South Planning Region (Bulgaria). *International Centre for Minority Studies and Intercultural Relations (IMIR)*, pp. 1-46.
- Modigliani, F., Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. – In: Kurihara, K. (eds.). *Post Keynesian Economics*. New Brunswick: Rutgers University Press.
- Noland, M. (2005). Religion, Culture, and Economic Performance. – *World Development*, 33(8), pp. 1215-1232.
- NSI – National Statistical Institute of Bulgaria. (2019). Population and Demographic Processes in 2018. Available at: <https://www.nsi.bg/en/node/17130> [accessed 20/9/2019].
- Posthuma, R. A., Dworkin, J. B. (2000). A behavioural theory of arbitrator acceptability. – *International Journal of Conflict Management*, 11(3), pp. 249-266.
- Poulton, H. (1991). *The Balkans: Minorities and States in Conflict* (Minority Rights Publications). Publisher: Minority Rights Group, ISBN-10: 1873194404.
- Quintal, V. A., Lee, J. A., Soutar, G. N. (2010). Risk, uncertainty and the theory of planned behaviour: A tourism example. – *Tourism Management*, 31, pp. 797-805.
- R Core Team. (2013). *R: A language and environment for statistical computing*. R foundation for statistical computing, Vienna, Austria, ISBN: 3900051070, Available at: <http://www.R-project.org/>, [accessed, 22/10/2019].
- Ramayah, T., Noor, M. N. M., Nasurdin, A. M., Hasan, H. (2003). Students' choice intention of a higher learning institution: an application of the theory of reasoned action (TRA). – *Malaysian Management Journal*, 7(1), pp. 47-62.
- Ramayah, T., Noor, M. N. M., Nasurdin, A. M., Sin, Q. B. (2004). The relationships between belief, attitude, subjective norm, intention, and behaviour towards infant food formula selection: the views of the Malaysian mothers. – *International Journal of Business*, 6(3), pp. 405-418.

- Ramayah, T., Rouibah, K., Gopi, M., Rangel, G. J. (2009). A decomposed Theory of Reasoned action to explain intention to use internet stock trading among Malaysian investors. – *Computers in Human Behaviour*, 25(2), pp. 1222-1230.
- Ramayah, T., Yusoff, Y.M., Jamaludin, N., Ibrahim, A. (2009). Applying the theory of planned behaviour to predict internet tax filing intentions. – *International Journal of Management*, 26(2) pp. 272-284.
- Rha, J.-Y., Montalto, C. P., Hanna, S. D. (2006). The effect of self-control mechanisms on household saving behaviour. – *Financial Counseling and Planning*, 17, pp. 3-16.
- Rhodes, R. E., Courmeya, K. S. (2003). Investigating multiple components of attitude, subjective norm, and perceived control: An examination of the Theory of Planned Behaviour in the exercise domain. – *The British Journal of Social Psychology*, 42, pp. 129-146.
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modelling. – *Journal of Statistical Software*, 48(2), pp. 1-36.
- Rutherford, L. G., DeVaney, S. (2009). Utilizing the theory of planned behaviour to understand convenience use of credit cards. – *Financial Counselling and Planning*, 20(2), pp. 48-63.
- Rutherford, L. G., DeVaney, S. (2009). Utilizing the theory of planned behaviour to understand convenience use of credit cards. – *Financial Counseling and Planning*, 20(2), pp. 48-63.
- Satsios, N., Hadjidakis, S. (2018). Applying the Theory of Planned behaviour (TPB) in saving behaviour of Pomak Households. – *International Journal of Financial Research*, 9(2), pp. 122-133.
- Souiden, N., Rani, M. (2015). Consumer attitudes and purchase intentions toward Islamic banks: the influence of religiosity. – *International Journal of Bank Marketing*, 33(2), pp. 143-161.
- Taylor, S., Todd, P. (1995). Understanding the information technology usage: a test of competing models. – *Information Systems Research*, 6(2), pp. 144-176.
- Teng, Y-M., Wu, K-S., Liu, H-H. (2012). Integrating Altruism and the Theory of Planned Behaviour to Predict Patronage Intention of a Green Hotel. – *Journal of Hospitality & Tourism Research*, 39(3), pp. 299-315.
- Todorova, M. (1998). Identity (trans)formation among Pomaks in Bulgaria. – In: Crawford, B., Lipschutz, R. D. (eds.). *The Myth of 'Ethnic Conflict': Politics, Economics, and 'Cultural' Violence*. University of California International and Area Studies Digital Collection, pp. 471-510.
- Tversky, A., Kahneman, D. (1981). The framing of decisions and the psychology of choice. – *Science*, 211(4481), pp. 453-458.
- Xiao, J. J., Wu, J. (2008). Completing debt management plans in credit counselling: An application of the theory of planned behaviour. – *Journal of Financial Planning and Counseling*, 19(2), pp. 29-45.
- Xiao, J. J., Wu, J. (2008). Completing debt management plans in credit counseling: An application of the theory of planned behaviour. – *Journal of Financial Planning and Counseling*, 19(2), pp. 29-45.
- Yuh, Y., Hanna, S. D. (2010). Which households think they save?. – *Journal of Consumer Affairs*, 44(1), pp.70-97.
- Zelizer, V. A. (1989). The Social Meaning of Money: Special Monies. – *American Journal of Sociology*, 95(2), pp. 342-377.
- Zhang, H., Li, L., Yang, Y., Zhang, J. (2018). Why do domestic tourists choose to consume local food? The differential and non-monotonic moderating effects of subjective knowledge. – *Journal of Destination Marketing & Management*, 10, pp. 68-77.