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Why Do Consumers Purchase Further Financial Services? Application of the Theory of Planned Behaviour

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Abstract

Certain dysfunctions of the financial service market are the consequence of poor consumer decisions influenced by emotions or unfair marketing practices. Understanding the mechanisms of such decisions may increase the effectiveness of consumer protection measures. To identify determinants of the decision to purchase another financial service, we conducted a pilot study using a CAWI (Computer-Assisted Web Interview) survey on 200 respondents. As expected, socio-demographic determinants cannot fully explain consumer behaviour in the financial service market. Therefore, to interpret the results, we employed Ajzen's theory of planned behaviour, which describes the influence of psychological factors (i.e., social norms, attitudes and perceived control) on consumer behaviour. To our knowledge, this approach has not been applied in the literature on consumer decisions in the financial service market. Our results show that the intention to purchase a new financial service is predominantly determined by social norms. The influence of other factors (i.e., attitudes and sense of control) is important but can largely be explained by norms. The level of financial education and awareness of consumer rights may be negligible on respondents' intentions. This finding may imply that consumer protection institutions must change their approaches. Promoting only financial education is probably insufficient, and additional effort is necessary to promote the desired change in social norms.

1. Introduction

The ultimate goal of financial service markets is consumer financial health, which is recognised as 'the day-to-day provision of financial solutions to consumers that build their long-term resilience and capability[1]'. The basic expectations of consumers are that they should be able to finance, make and receive payments and save money in a

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[1] As defined by the Center for Financial Services Innovation.

secure manner for major goals, including those that require long-term planning and financial discipline. Thus, consumers constitute an essential group of financial market participants, generating high levels of demand for products and services. However, they are perceived as unprofessional clients with limited knowledge and skills, making decisions under the influence of emotions or irrational impulses (Campbell et al., 2011; Cialdini, 2001; Hollensen, 2003). The consequences of this particular sensitivity of consumers to irrational incentives are dysfunctions in the financial service market. These dysfunctions are considered to offer consumer services and products that contribute to the deterioration of their financial condition. Consumers, as less competent and highly sensitive to emotional stimuli, require special (institutional) protection, which is the establishment of appropriate regulations and institutions to safeguard their interests when contracting with financial service providers. Sometimes, protection restricts consumers' access to financial services or limits consumers' right to decide on their own affairs, which can also be considered dysfunctional. One of the main challenges of consumer protection is to aid consumers in understanding their needs and the consequences of their decisions when buying a particular financial service and exercising due care. To effectively protect consumers, we must understand the determinants that influence their decisions.

Financial services are characterised by a high degree of complexity and variety and incomplete transparency, with significant risks for consumers, especially when they lack sufficient financial literacy and familiarity with the mechanisms of modern financial markets. When purchasing further financial products, consumers often do not identify the costs and risks associated with them due to a lack of information, a lack of financial awareness or a lack of need to delve into the details of the service. In many cases, this is the result of a biased product presentation by their suppliers, with an emphasis on presenting benefits and advantages while deliberately ignoring risks and drawbacks. An additional factor that increases consumers' risk is the dynamically changing environment, including the emergence of new previously unknown financial products and changes in distribution channels.

To understand the psychological determinants of consumers' decisions, we used Ajzen's theory of planned behaviour (TPB), which is an extension of Ajzen and Fishbein's theory of reasoned action. This theory assumes that three basic components, that is, attitude, subjective norms and perceived control, determine an individual's behavioural intention. Sequentially, intention is the most proximate determinant of human behaviour.

Although few previous works have applied TPB to financial decisions, we decided to employ this theory in our study. The results obtained by Alleyne and Broome (2010) as well as Paramita et al. (2018) show that attitude, subjective norms and perceived control are important predictors of investment intentions. On the other hand, Gopi & Ramayah (2007) used TPB to explain online trading intention, and Cucinelli et. al (2016) suggest that each TPB construct contributes to explaining a retail customer's intention to apply for a medium/high risk financial product. We considered, therefore, that the theory may also be appropriate when investigating other consumer intentions in the financial services market.

In this market, service providers offer a range of different products while also encouraging consumers to purchase them. Therefore, we considered that the decision

to purchase a new (subsequent) financial service is consumer behaviour with the greatest influence on market functioning and decided to investigate the determinants of this decision.

The paper identifies the determinants of the expansion of financial services used by consumers. In particular, it examined, the dependence of the intention to purchase another financial product on financial knowledge, awareness of consumer rights as well as psychological factors, represented by attitudes, subjective norms and perceived control (as predicted by TPB). The study addressed the following research questions:

- what factors influence consumers' decisions to purchase a new financial product?
- what is the relevance of Ajzen's TPB in explaining consumer behaviour in the financial service market?
- does financial literacy and awareness of consumer rights influence the decision-making mechanism in the financial service market?

We posed the following hypothesis regarding the influence of psychological factors on consumer intention to expand the range of financial services used (to purchase another financial product):

> *H1: Each of the TBP factors, that is attitudes, norms and sense of subjective control, has a positive impact on the intention to purchase a further financial product.*

Regarding the impact of consumer financial education, we set out the hypothesis:

> *H2: Both the level of financial literacy and the knowledge of consumer rights have a significant impact on the intention to purchase a further financial product.*

The contribution of this study to the existing literature is as follows. First, to our knowledge, this is the first work on the influence of psychological factors and financial education on intentions to expand the range of financial services used. Second, we show that psychological factors (primarily social norms) have a significant greater influence on consumers' intentions than their financial education, which should be reflected in approaches to consumer protection

The results of the study indicate what makes consumers vulnerable to offers from financial service providers and may therefore have implications for consumer protection policy. Our study is closely related to the work of Cucinelli et al (2016). However, unlike that paper, firstly we focus on the propensity itself to increase the range of financial services used, and secondly, we use different analytical tools (hierarchical logistic regression).

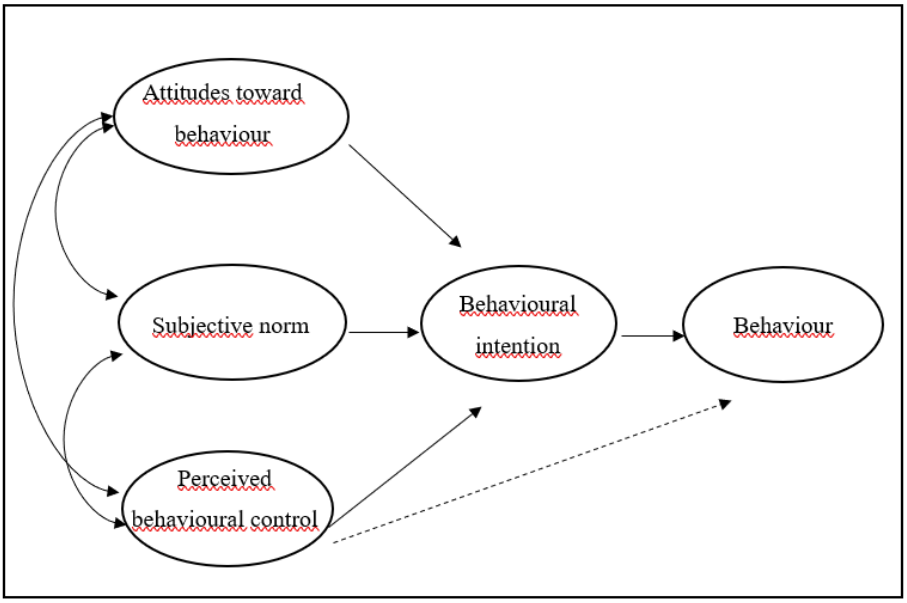
The article begins with an introduction of the issue; the materials and methods are then presented, including in particular the theoretical background, research tool and analysis; and finally, the results of the research are described based on which conclusions and discussion were developed.

2. Materials and Methods

2.1 Theoretical Background

. The essence of TPB is the confrontation of human needs with possible behaviours and their consequences. Performing an action is preceded by the occurrence of a behavioural intention, which shows a person's readiness to conduct a certain action. In other words, intentions are the main determinants of behaviour. TPB assumes (Figure 1) that people's intentions are based on their attitudes towards a certain activity, their subjective norms and their perceived control of that behaviour (Ajzen, 1985, 1988, 1996, 2020). According to Ajzen's theory, the stronger the influence of attitudes towards behaviour, subjective norms and perceived behavioural control, the stronger the individual's intention to undertake a given behaviour becomes (Ajzen, 1991).

Figure 1 Basis of the Theory of Planned Behaviour



Source: Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhn, J. Beckman (Eds.), *Action-control: From cognition to behavior*, Springer, pp. 11–39.

Many researchers who have conducted human behaviour studies similar to our study in terms of determinants of consumer behaviour have emphasised that TPB is well supported by empirical evidence (Ajzen, 1991; Hindle et al., 2009; Krueger et al., 2000; Mykytyn & Harrison, 1993; Vamvaka et al., 2020). However, the adoption of Ajzen's approach is not limited to psychology and sociology. In finance, the TPB has been applied to predict investor attitudes in financial markets (e.g., Nadeem et al., 2020; Paramita et al., 2018; Raut et al., 2018) and Islamic banking financial services (e.g., Albashir et al., 2018; Osman et al., 2019), as well insurance (e.g., Nomi & Sabbir, 2020; Omar, 2007), on line trading (Gopi & Ramayah 2007) and

Internet banking (e.g., Cucinelli et al., 2016, 2017; Gu et al., 2009; Jouda et al., 2020). We have not found in existing literature the adoption of TPB in research on consumer protection in financial markets and consumers' decisions about purchasing a new financial product.

Based on the model, we defined the attitude towards behaviour as a person's beliefs about the consequences of adopting a particular behaviour and an assessment of the extent to which these consequences are desired by consumers (Ajzen, 1991, 2020; Fernandes & Proença, 2013; Yan, 2014). Consumers with different needs and expectations decide to purchase (or not) the offered financial product. In our research context, attitude towards behaviour is the consumer's positive or negative expectation about the effects about the effects of extending the range of services used. Attitudes towards purchasing a further financial product were measured by survey with statements regarding consumer beliefs about the basic functions of financial products, mainly by saving, incurring debt or taking risks. The main feature differentiating this group of questions from others was their orientation to the respondent's individual attitude to a specific aspect, as opposed to questions about norms wherein we asked about the general views of the whole society, as well as questions about perceived control based on the respondents' experiences. The following attitudes of the respondents were statistically significant in the study:

- attitudes towards taking risks for greater benefits
- attitudes towards extravagance on spending money
- attitude towards crediting certain expenses
- attitude towards poor budget management

Each of these concerns the attitudes of respondents at a given moment presented in a specific context; however, they do not represent certain values grounded in an individual (as opposed to norms that express socially accepted norms). This feature of the variable indicates that when the initial conditions are changed, the set of statements typical of attitudes towards the purchase of a new financial service may be different.

We treated perceived behavioural control as a self-assessment of how easy or difficult
a given behaviour, as well as confidence in one's own ability to perform an action, is to undertake (Ajzen, 1991, 2002; Moriano et al., 2012). The concept of the subjective norm in investment was first mentioned in the work of East (1993). Some researchers treat perceived behavioural control as identical to Bandura's (1977) sense of self-efficacy, which relates to the degree of difficulty of an action and is based on past and anticipated experiences. We constructed the questions about perceived behavioural control in the questionnaire based on the consumers' beliefs about how accurate their previous choices are and how well prepared they are to purchase a new financial product

Perceived behaviour control is a function of belief control, which also has a direct impact on behaviour. This characteristic is due to the fact that consumers are more likely and more willing (while being aware of their own control) to engage in certain behaviours that they have evaluated positively in the past.

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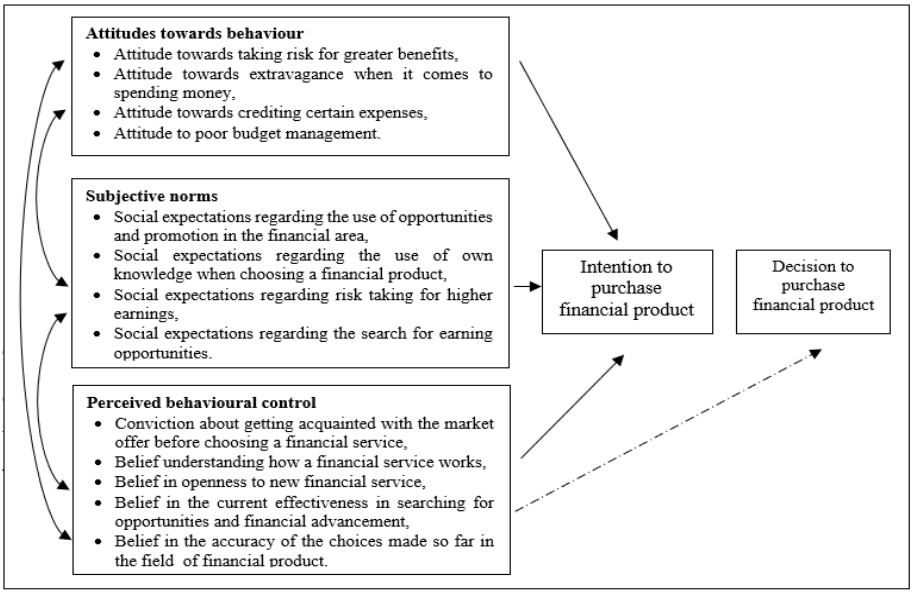
In our study, we determined perceived behavioural control by assessing factors such as beliefs about the need to read the full offer and beliefs about understanding how a financial service works, before purchasing another service.

In addition, we assessed beliefs about openness to new products, self-efficacy in seizing opportunities and the accuracy of previous decisions.

Subjective norms in our research refer to social pressure, which is the influence of the social groups of family, friends, colleagues and so on, that influences whether to perform the behaviour. This category includes both the individual's expectations that he or she will behave in a certain way (prescriptive norms) and a form of imitating the behaviour of people important to the individual (descriptive norms) (Ajzen, 1985). Social norms are the unwritten rules of beliefs, attitudes and behaviour considered acceptable in a particular social group or culture. Standards provide us with the expected direction of behaviour and functioning to ensure order and predictability in society. This phenomenon is called society acquired; however, it is not an updated financial knowledge. Its consequence is based on certain norms assimilated in childhood and established in one's own consciousness over the years, which, however, does not necessarily correspond to the current market conditions. By considering this perspective, the norms differ from other factors by a certain universality for a large group of people, and this factor is how the questionnaire was prepared—certain belief characteristics of the Polish society are reflected. In our study, one of the identified norms was social expectations regarding the use of opportunities and promotion in the financial area. Poles adopt these values from their families and homes as a result of primary socialisation, such as with older generations, especially those who have experienced financial difficulties, who are taught to save through various types of reductions and promotions, and these values are passed on to future generations. Another identified norm is social expectations regarding the use of one's own knowledge in making financial decisions. These values are understandable in the context of the crisis of trust in financial institutions and professionals, as well as the transfer of the principle between generations to choose products that we know, which therefore represent our knowledge. In Polish society, one can also believe that taking risks is necessary to increase earnings. This feeling is grounded in various expert portals, which treat it as a specific approach to investing that must be accepted to be able to invest. The final norm identified is the belief that you should always look for an opportunity to earn. One of the basic ways is to compare the prices of individual products or offers from different banks, as differences in fees and commissions may cause the price to be higher than it originally seemed.

The other factors considered in our study were demographics (i.e., gender and age) and socio-cultural factors (i.e., professional activity and education).

Figure 2 TPB Scales



Notes: Figure 2 shows only the intention to purchase another financial product and its determinants (norms, attitudes and behavioral control) within the Ajzen's theory of planned behavior. The chart contains the statements for the individual scales in our study.

Another determinant is the level of education, which affects both the needs of consumers and the possibility of satisfying them and their personality traits, perceptions or attitudes (psychological factors). The first aspect concerns the influence on the hierarchy and the size of the needs that grow with knowledge and awareness. Properly educated people feel higher-order needs to a greater extent but can find and analyse information about products that can satisfy them, which in turn is related to marketing determinants, and also have greater possibilities of financing them (economic conditions).

Professional activity is a factor that influences the amount of income (economic conditions) and the way of spending free time. This feature is also related to the professional position of the consumer, which in turn is the basic determinant of the level and style of life, social status, social grouping and market behaviour of the consumer.

2.2 Research Tool

The CAWI survey was conducted between March and June 2021 using an electronic questionnaire. This procedure ensured that we received responses from 200 participants from a wide range of ages, genders and educational levels. Ajzen's approach was applied in this study. We investigated the factors influencing consumers' decisions to expand their financial services and, in particular, their decisions to purchase another financial product. Respondents were asked to answer questions to determine the importance of individual components of the Ajzen's theory, that is, attitudes towards behaviour, subjective norms and perceived

behavioural control with the intention to extend the range of financial services purchased (purchase of another final product). The importance of each component to an individual respondent was measured by their degree of agreement with the proposed statement according to a five-point Likert (1932) scale ranging from 1 (*total disagreement*) to 5 (*total agreement*).

Respondents' intentions were determined by one statement: 'I want to purchase another financial service in the near future', for which the respondent was asked to provide a subjective degree of agreement/disagreement. The declared degree of agreement/disagreement was given a numerical value using a five-point Likert scale (1 = *strongly disagree*, 2 = *rather disagree*, 3 = *no opinion*, 4 = *rather agree*, 5 = *strongly agree*). Descriptive statistics of the respondents' answers are presented in Table 1.

Table 1 Statistical Description of Respondents' Agreement/Disagreement Degree

	Min	*Q1*	*Median*	*Q3*	*Max*
Intensions (Likert-type variable)	1	2	3	4	5
Positive intention to purchase (binary variable)	0	0	0	1	1
Attitudes (four Likert-type variables)					
A1: Attitude towards taking risks for greater rewards	1	2	3	4	5
A2: Attitude towards extravagant money spending	1	1	2	3	5
A3: Attitude towards borrowing	1	2	3	4	5
A4: Attitude to poor budget management	1	1	1	3	5
Attitude index (sum of the above four Likert-type variables)	4	8	10	12	20
Subjective norms (four Likert-type variables)					
N1: Social expectations regarding the use of opportunities and promotion in the financial area	1	2	4	4	5
N2: Social expectations regarding the use of own knowledge when choosing a financial product	1	2	3	4	5
N3: Social expectations regarding risk taking for higher earnings	1	1	2	4	5
N4: Social expectations regarding the search for earning opportunities	1	3	4	5	5
Subjective norms index (sum of above Likert-type variables)	5	10	13	15	20
Perceived behavioural control (five Likert-type variables)					
C1: Conviction about getting acquainted with the market offer before choosing a financial service	1	4	4	5	5
C2: Belief in understanding how a financial service works	1	4	5	5	5
C3: Belief in openness to new financial services	1	3	4	4	5
C4: Belief in the current effectiveness in searching for opportunities and financial advancement	1	3	4	4	5
C5: Belief in the accuracy of the choices made so far in the field of financial products	1	3	4	4	5
Perceived behavioural control index (sum of the above five Likert-type variables)	9	17	20	22	25

Attitudes towards purchasing a new product relate to both positive and negative assessments of specific financial aspects. Attitudes were determined using four statements. The higher the cumulative score in each of the statements, the stronger the positive attitude towards purchasing a new financial product.

Subjective norms refer to the pressure of important people on how a consumer should behave in the financial world. The scale of social norms consisted of four items. An example item was: 'It is worth taking advantage of various opportunities and promotions in the financial area' (*strongly disagree* to *strongly agree*). The higher the total score, the higher the importance of social norms for consumer decision in purchasing a new financial product.

The perceived control scale refers to the level of ease or difficulty of participants in controlling their ability to purchase a new financial product. This scale consists of five items. An example item was: 'I believe that my financial services choices so far have been accurate' (*strongly disagree* to *strongly agree*). A higher cumulative score reflects a higher level of perceived control in purchasing a new financial product. A transcription of the sentences included in the survey can be found in the Annex.

Before performing the analyses, the data were checked and cleared of missing information and out-of-range values or values that were excluded from the survey. In the next step, groups of respondents with very low numbers were identified. The groups identified were as follows:

- two respondents declared vocational education.
- seven persons did not specify their gender.

People with vocational education were included in the group of those with gymnasium education. Respondents from the latter two groups were excluded from further analysis. The final sample consisted of 193 respondents (see Table 2).

Table 2 Responses: Descriptive Statistics

Variable		***N* = 193**	**%**
Age			
	16–29 years	90	46.6%
	30–44 years	38	19.7%
	45–59 years	29	15.0%
	over 60 years	36	18.7%
Gender			
	male	81	42.0%
	female	112	58.0%
Professional activity			
	active	98	50.8%
	inactive	95	49.2%
Education			
	gymnasium or vocational	24	12.4%
	high vocational school	27	14.0%
	high school	40	20.7%
	Bachelor's degree or higher	102	52.8%

The responses obtained from the questionnaire were subjected to statistical analysis. The selection of the methods used showed that the results obtained in the questionnaire study were not numerical in nature and allowed only for the determination of a monotonic relationship (Likert scale). This approach required the use of statistical tools appropriate for this type of random variable.

The survey included quizzes designed to assess respondents' financial literacy and consumer rights knowledge. Both quizzes consisted of a single-choice test (10 test questions). The test questions (and the number of correct answers) are presented in the Annex. In contrast to that in the OECD (2022) study, we used slightly different questions in our financial literacy tests. To maintain the comparability of results, we relied on financial literacy surveys conducted in Poland by the National Bank of Poland (2015) and the Warsaw Institute of Banking (2021). A summary of the test results is presented in Table 3.

Table 3 Financial Literacy and Consumer Rights Test Summary

N = 187	*Min*	*Q1*	*Median*	*Q3*	*Max*
Financial literacy note (number of correct answers)	0	5	7	8	10
Consumer rights note (number of correct answers)	1	5	6	7	10

2.3 Analysis

The first stage of statistical analysis was to determine the correlation between the variables. Given the nature of the variables, Kendall's $\tau_b$was used as a measure of correlation (Agresti, 2020; Kendall, 1938; Kendall, 1955), where C is the number of concordant pairs (i.e., increase or decrease in component strength and intention); D is the number of discordant pairs (i.e., increase in component strength and decrease in intention or decrease in component strength and increase in intention); T_1 and T_2 are the numbers of pairs tied for component and intention (i.e., an increase or decrease in one characteristic is not reflected in a change in the other), respectively.

$$\tau_b = \frac{C - D}{\sqrt{N(N-1) - T_1(T_1-1)}\sqrt{N(N-1) - T_2(T_2-1)}} \quad (1)$$

The significance of each of the mentioned factors on consumer intention was tested using a typical pair of statistical hypotheses, which are:

- null hypothesis H_0 $(\tau_b = 0)$—assuming no effect of a certain component influence on consumer intention
- alternative hypothesis H_1 $(\tau_b \neq 0)$—assuming that this influence exists.

These hypotheses were verified using the following test statistic (Kendall, 1955), which has an asymptotically standard normal distribution:

$$\frac{3\tau_b\sqrt{n(n-1)}}{\sqrt{2(2n+5)}} \tag{2}$$

The null hypothesis $(\tau_b = 0)$ was rejected in favour of the alternative hypothesis $(\tau_b \neq 0)$ at a significance level of α = 5% bilaterally (typical for analyses in the social sciences), that is, if the probability was $p(|x > z| \leq 0.05)$.

Determinants of respondents' intentions were identified using binary logistic regression models. A binary variable Y (positive purchase intention) was introduced, whose value was equal to 1 when the intention score on the Likert scale was equal to 4 or 5.

The logistic regression method is often used in determinant testing. This regression models the probability of a dependent event from the values of independent, categorical or numerical variables (Kleinbaum et al., 2002; Hosmer et al 2013). The dependent variable in logistic regression may have a Bernoulli distribution, and the unknown probability P is estimated for any linear combination of the independent variables. To do this estimation, the independent variables must be combined with a Bernoulli distribution using a link function, which is the natural logarithm of the odds ratio (logit). This function maps the linear combination of the independent variables to the Bernoulli probability distribution with a domain from 0 to 1. Successively, the natural logarithm of the odds ratio is equal to the linear function of the independent variables. Therefore, logistic regression describes the logit-transformed probability as a linear relationship with the predictor variables and is as follows:

$$logit(P) = log\left(\frac{P}{1-P}\right) = y \tag{3}$$

where $log\left(\frac{P}{1-P}\right)$ is called the odd logarithm, which is also known as logodd or logit. The odds reflect the ratio of the probability of 'success' to the probability of 'failure' and are modelled as follows:

$$\frac{P}{1-P} = e^{y} \tag{4}$$

where

$$y = \beta_0 + \beta_1 X_1 + \cdots + \beta_k X_k \tag{5}$$

and $\beta_1 \ldots . \beta_k$ are regression beta coefficients of explanatory variables $X_1 \ldots . . X_k$. Thus, the probability of success P(Y = 1) is expressed as:

$$P(Y = 1) = \frac{1}{1 + e^{-(\beta_0 + \beta_1 X_1 + \cdots + \beta_k X_k)}} \tag{6}$$

The parameters of this model are estimated using the maximum likelihood method. This model allows the estimation of the so-called odds ratios marked with $Exp\ (\beta_i)$ or OR_i, which determines a relative probability of the event occurrence,

that is, how many times the estimated probability changes along with the increase of X_i by unit (for continuus variables), or how many times it is higher or lower in the examined group relative to the reference group (for quantitative exogenous variables). In our analysis, we used the so-called hierarchical binary logistic regression, by which we tested the hypothesis that the introduction (step by step) of certain independent variables improves our ability to predict membership in the modelled category of the dependent variable, after accounting for the relationship between certain control independent variables and the dependent variable. The variables used in the model and the coding schemes of the variables are presented in Table 4.

Table 4 Variables Introduced into the Model and Coding Schemes

Type	*Variable*	*Code*	*Explanation*	
Explained variable				
	Positive intention to purchase new financial service	1	the declared degree of agreement was higher than 3 in a five-point Likert scale	
		0	otherwise	
TPB variables				
	Norms (index)	4 – 20	sum of numerical values reflecting agreement with N1 - N4 statements in a five-point Likert scale	
	Attitudes (index)	4 – 20	sum of numerical values reflecting agreement with A1 - A4 statements in a five-point Likert scale	
	Control index	5 - 25	sum of numerical values reflecting agreement with C1 - C5 statements in a five-point Likert scale	
Test scores				
	Financial literacy	0 - 10	test score	number of correct answers
	Consumer rights awareness	0 - 10	test score	number of correct answers
Socio-demographic variables				
	Age range	1	16–29 years	
		2	39–44 years	
		3	45–59 years	
		4	60 years or older	
	Gender	1	female	
		2	male	
	Education	1	junior high school or vocational	
		2	high vocational	
		3	high school	
		4	bachelor's degree or higher	
	Professional activity	1	active	
		2	not active	

3. Results

The internal consistency tests (by means of by Cronbach's (1951) α coefficient) for all the sets of statements have shown positive results (see Table 5), allowing the cautious formulation of conclusions concerning the importance of

individual components (scales) on consumer intentions. Therefore, for further analyses, we decided to construct indices for each component (i.e., attitudes, subjective norms and control) as the sum of the values (on a five-point Likert scale) of each statement.

To verify the reliability of each index created, we conducted tests of its internal consistency based on specific metrics proposed by the literature (Hair et al., 2017; Jarvis et al., 2003). We used composite reliability (CR), average variance extracted (AVE) and Cronbach's alpha. The threshold for Cronbach's alpha and CR should be 0.7 or higher. However, Cronbach's alpha has been criticised for underestimating reliability (Peterson, Kim, 2013). Therefore, we adopted the criterion proposed by Nunally (Nunally, Bernstein, 1994), assuming that a scale is considered internally consistent if $\alpha \geq 0.7$, and when a latent variable that is still poorly empirically understood is examined, a threshold of $\alpha \geq 0.6$ is sufficient. Factor load and AVE are proposed to measure convergent validity. When the factor load for the vast majority of the items was above 0.7 and the AVE for all variables was above 0.475, the convergent validity test was passed. This procedure indicates that our sample has acceptable internal consistency and passes the reliability tests.

Given that Likert scales are arbitrary, and the value assigned to a Likert item has no objective numerical basis either in terms of measurement theory or scale (from which a distance metric can be determined), we consistently avoided parametric analysis. When looking for the influence of individual components on respondents' intentions, we used statistical tools appropriate for ordinal scales. Using Kendall's τ_b, (Kendall, 1938, 1955) we examined correlations between analysed variables.

Table 5 Results of Internal Consistency Tests

TPB scale	*Statements*	*FL*	*AVE*	*CR*	*Cronbach's Alpha*
Attitudes towards behaviour			0.500	0.798	0.663
	A1	0.701			
	A2	0.806			
	A3	0.604			
	A4	0.702			
Subjective norm			0.537	0.822	0.712
	N1	0.718			
	N2	0.716			
	N3	0.783			
	N4	0.711			
Perceived behavioural control			0.476	0.817	0.720
	C1	0.806			
	C2	0.659			
	C3	0.722			
	C4	0.505			
	C5	0.722			

The results are presented in Table 6. The correlation pattern indicates positive and significant relationships between the TPB variables, that is, norms, attitudes and perceived control (0.228–0.438). In addition, all TPB variables are significantly positively correlated with declared positive intentions to purchase another financial

service, which may demonstrate that all Ajzen scales play an important role in shaping these intentions. The norms index is the variable wherein the correlation coefficient with intentions is the highest (0.299), which may suggest a key influence of norms. Among other variables, age range is distinguished, which is significantly positively correlated with intention but has statistically significant negative coefficients of correlation with the TPB variables. Gender is significant for attitudes and norms, and educational level shows a positive correlation with perceived control. Neither of these variables has statistically significant correlations with intentions. By contrast, work activity (a binary variable) shows a significant correlation with intentions and no such correlations with TPB variables. Interestingly, financial literacy and knowledge of consumer rights do not have significant statistical correlations with intentions and TPB variables. However, the positive correlation of financial education with perceived control is an exception.

Although the correlation coefficients for all pairs of variables used did not exceed 0.5, a collinearity test was performed by calculating the variance inflation factor (VIF) for all explanatory variables. The resulting VIF values did not exceed 2.2, indicating the absence of collinearity problems in regression analysis (Menard, 2001).

Hierarchical logistic regression analysis was conducted to analyse the ability of selected explanatory variables, that is, socio-demographic variables, TPB scales and test scores assessing financial literacy and knowledge of consumer rights, to predict purchase intention for a new financial service. Abrahamse & Steg (2009) adopted a similar approach. We built a hierarchical series of six binary logistic regression models. In each successive model, further explanatory variables were added:

- in Model 1, only socio-demographic variables were used (i.e., age, gender, education level and work activity).
- in Model 2, an assessment of financial literacy was added.
- in Model 3, an assessment of knowledge of consumer rights was added.

In subsequent models, the TPB scales were incorporated:

- in Model 4, attitudes
- in Model 5, perceived control
- in Model 6, norms

The parameters of the models are presented in Table 7. The estimated values of the regression coefficients β their standard errors, and the odds ratios are presented in the columns labelled B, SE and OR, respectively. Each successive model, has a lower deviance value ($-2LL$) but joint significance tests of the models show that Models 1, 2 and 3 are not statistically significantly different (at less than 5% significance level) from the model containing only the constant, while each of the successive models (Models 4, 5 and 6) is significantly different ($p < 0.01$).The goodness of fit of the models was verified with the Hosmer-Lemeshow (1980) test. The p values higher than 0.05 indicate the good fit of each model. The Nagelkerke (1991) pseudo-R^2 has been chosen as a proxy for the proportion of variance explained by the model.

In Model 1 (four socio-demographic variables), the pseudo-R^2 amounts 10.4%, and the classification accuracy among respondents is equal 70.5%. The only statistically significant variable is the age range of the respondents.

Table 6 Analysis of Correlations between Variables

Variables	***Positive intention to purchase***	***Norms (index)***	***Attitudes (index)***	***Control (index)***	***Age range***	***Gender***	***Work activity***	***Education level***	***Finacial literacy***	***Consumers right awareness***	***VIF***
Positive intention to purchase											
Norms (index)	,299**										2.142
	0.000										
Attitudes (index)	,187**	,416**									1.628
	0.002	0.000									
Control (index)	,130*	,438**	,228**								2.052
	0.034	0.000	0.000								
Age range	,206**	-,159**	-,168**	-,207**							1.318
	0.002	0.005	0.003	0.000							
Gender	0.022	,211**	,168**	0.105	0.024						1.092
	0.760	0.001	0.006	0.086	0.722						
Work activity	-,167*	-0.044	-0.066	-0.080	-,272**	-0.123					1.498
	0.021	0.476	0.279	0.194	0.000	0.088					
Education level	0.012	0.103	0.098	,239**	,142*	0.106	-,510**				1.904
	0.858	0.071	0.088	0.000	0.023	0.114	0.000				
Finacial literacy	0.044	0.020	-0.012	,190**	0.004	0.040	-,287**	,397**			1.496
	0.480	0.706	0.824	0.000	0.940	0.528	0.000	0.000			
Consumers right awareness	-0.021	-0.039	-0.068	0.083	,131*	0.004	-,229**	,368**	,354**		1.403
	0.737	0.466	0.209	0.123	0.026	0.945	0.000	0.000	0.000		

Notes: **Correlation significant at the 0.01 level (two-tailed), * Correlation significant at the 0.05 level (two-tailed)

As expected, gradually extending the set of explanatory variables with the result of testing financial literacy (Model 2) and knowledge of consumer rights (Model 3), as these variables does not show a statistically significant correlation with purchase intention, does not practically improve the classification accuracy at 71.0% and 71.5%, respectively. The only statistically significant variable is the age range. pseudo R^2 also increases slightly to 10.8% and 11.5% in Models 2 and 3, respectively.

Only the introduction of TPB scales into the set of explanatory variables produces significant improvement. First, we introduced the attitude index (Model 4). This variable is a significant predictor ($p < 0.001$), whereas the predictive significance of age is also strengthened. In this Model, pseudo R^2 reaches a value of 23.8%, and classification accuracy among respondents rises to 73.6%. Adding the perceived control index in the next step (Model 5), the model with the highest number of statistically significant predictors is obtained. These predictors are attitude index ($p < 0.01$), perceived control index ($p < 0.05$), work activity ($p < 0.05$) and age range ($p < 0.01$).

Table 7 Estimated Hierarchical Logistic Regression

		Model 1			Model 2		
Variable		***B***	***SE***	***OR***	***B***	***SE***	***OR***
Constant		-0.684	0.669	0.504	-1.092	0.819	0.336
Age range	*(base 16-29 years)*						
	30 - 44 years	0.775	0.527	2.17	0.755	0.529	2.128
	45 - 59 years	0.603	0.538	1.83	0.591	0.539	1.806
	60 years and over	1.194 **	0.457	03.3	1.261 **	0.464	3.528
Gender	*(base female)*						
	male	0.032	0.336	01.3	0.024	0.337	1.024
Education level	*(base gymnasium or vocational)*						
	higher vocational	0.314	0.663	1.37	0.309	0.662	1.362
	high school	-0.04	0.633	0.96	-0.07	0.629	0.93
	BSc or higher	-0.47	0.608	0.63	-0.62	0.629	0.538
Work activity	*(base not active)*						
	Active	-0.8	0.431	0.45	-0.78	0.433	0.456
Financial literacy					0.076	0.089	1.079
Right awareness							
Attitudes							
Norms							
Control							
-2LL		227.5			226.8		
Joint significance test		Chi2=14.844 df=8 p=0.062			Chi2=15.586 df=9 p<0.076		
Nagelkerke pseudo-R^2		0.104			0.108		
Hosmer & Lemeshow test		*p=0.928*			*p=0.850*		
Classification accuracy		70.5%			71.0%		

*Notes: *** p<0.001 ** p<0.01 *p<0.05*

Table 7 Estimated Hierarchical Logistic Regression Continued I

		Model 3			Model 4			
Variable		***B***		***SE***	***OR***	***B***		***SE***	***OR***
Constant		-0.807		0.873	0.446	-3.203	**	1.075	0.041
Age range	*(base 16-29 years)*						**		
	30 - 44 years	0.826		0.536	2.28	0.811		0.571	2.251
	45 - 59 years	0.648		0.545	1.91	0.639		0.577	1.894
	60 years and over	1.328	**	0.473	3.77	1.966	***	0.529	7.14
Gender	*(base female)*								
	male	0.014		0.338	1.01	-0.21		0.363	0.813
Education level	*(base gymnasium or vocational)*								
	higher vocational	0.355		0.667	1.43	-0.03		0.692	0.967
	high school	0.031		0.641	1.03	-0.65		0.685	0.522
	BSc or higher	-0.482		0.646	0.62	-1.16		0.694	0.314
Work activity	*(base not active)*								
	Active	-0.768		0.435	0.46	-0.87		0.462	0.418
Financial literacy				0.093	1.11	0.138		0.099	1.149
Right awareness				0.108	0.9	-0.04		0.114	0.959
Attitudes						0.226	***	0.055	1.253
Norms									
Control									
-2LL		225.8				206.3			
Joint significance test		Chi2=16.510 df=10 p<0.086				Chi2=35.987 df=11 p<0.001			
Nagelkerke pseudo-R^2		0.115				0.238			
Hosmer & Lemeshow test		*p=0.829*				*p=0.154*			
Classification accuracy		71.5%				73.6%			

*Notes: *** p<0.001 ** p<0.01 *p<0.05*

Table 7 Estimated Hierarchical Logistic Regression Continued II

		Model 5				Model 6			
Variable		***B***		***SE***	***OR***	***B***		***SE***	***OR***
Constant		-6.674	***	1.432	0.001	-6.057	***	1.551	0.002
Age range	*(base 16-29 years)*		***				***		
	30 - 44 years	0.768		0.617	2.16	0.760		0.619	2.138
	45 - 59 years	0.595		0.637	1.81	0.526		0.642	1.693
	60 years and over	2.758	***	0.613	15.8	2.654	***	0.624	14.214
Gender	*(base female)*								
	male	-0.8		0.426	0.45	-0.826		0.427	0.438
Education level	*(base gymnasium or vocational)*								
	higher vocational	0.898		0.767	2.46	1.161		0.826	3.194
	high school	-0.39		0.743	0.68	-0.163		0.787	0.850
	BSc or higher	-0.95		0.745	0.39	-0.658		0.809	0.518
Work activity	*(base not active)*								
	Active	-0.97		0.501	0.38	-0.931		0.501	0.394
Financial literacy		0.174		0.109	1.19	0.202		0.114	1.224
Right awareness		-0.05		0.13	0.95	-0.053		0.131	0.949
Attitudes		0.061		0.065	1.06	0.058		0.065	1.059
Norms		0.361	***	0.075	1.44	0.411	***	0.092	1.508
Control						-0.083		0.083	0.920
-2LL		177.05				176.0			
Joint significance test		Chi2=65347 df=12 p<0.001				Chi2=66.363 df=12 p<0.001			
Nagelkerke pseudo-R^2		0.402				0.407			
Hosmer & Lemeshow test		p=0.067				p=0.439			
Classification accuracy		78.8%				79.3%			

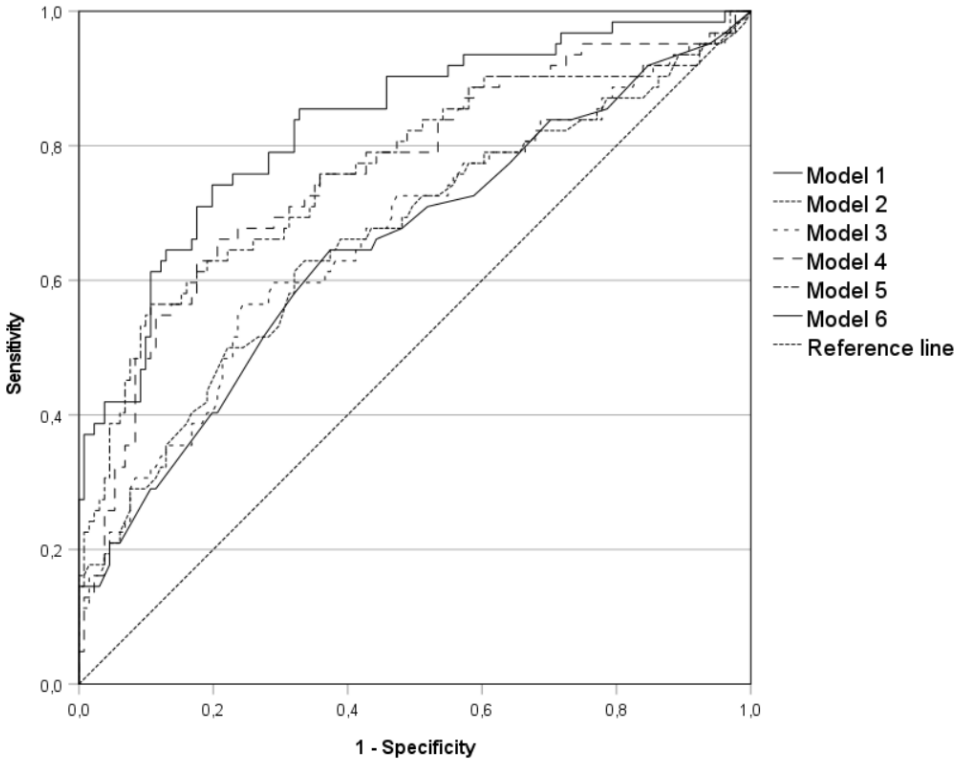
*Notes: *** p<0.001 ** p<0.01 *p<0.05*

In Model 5, pseudo $R^2$and classification accuracy are 26.8% and 77.7%, respectively. In the final model (Model 6), the norm index is included. Norms has emerged as the strongest and only predictor of purchase intention, apart from age range. The inclusion of norms in the model have implicated that other TPB scales (i.e., attitudes and perceived control) are not significant predictors. The pseudo R^2has increased significantly to 40.7%, and the classification accuracy has reached 79.3%.

The effectiveness of the models presented above for determining consumer intentions to purchase the next product can be represented as a receiver operating characteristic curve (ROC). This curve plots the true positive rate (sensitivity) versus the false positive rate (specificity) at different classification thresholds (Figure 3).

The ROC curve shows the trade-off between true positives and false positives at different thresholds. The lower the classification threshold, we will classify more observations as positive, increasing the number of true positives. However, this will increase the number of false positives. The ROC curve of a good classifier is closer to the upper left of the graph. The closer the curve approaches the diagonal of the ROC space (baseline), the less efficient is the model.

Figure 3 ROC Curves for the Hierarchy of Models



The area under the ROC curve (AUC) provides an aggregate measure of performance across all possible classification thresholds. It is equivalent to the probability that a randomly selected positive instance is ranked higher than a randomly chosen negative instance. Thus, in practice, the AUC performs well as a general measure of predictive accuracy. The AUC values for the hierarchy of the model are shown in Table 8.

Table 8 Area under the Receiver Operating Characteristic Curve (AUC)

Model	AUC	Std. error[a]	Asimptiotic significance[b]	Asymptotic 95% confidence range	
				Lower bound	Upper bound
1	0.651	0.044	0.001	0.564	0.737
2	0.662	0.044	0.000	0.575	0.749
3	0.666	0.044	0.000	0.580	0.752
4	0.761	0.039	0.000	0.685	0.837
5	0.763	0.040	0.000	0.684	0.841
6	0.831	0.032	0.000	0.768	0.895

Notes: a. Assuming a non-parametric distribution. b. Null hypothesis: Area = 0.5

4. Discussion

The research methodology used allows the verification of individual groups of variables when determining the determinants of consumers' intention to purchase another financial service. This study demonstrates the predictive accuracy of TPB in explaining consumer intentions in the financial service market. The use of socio-demographic variables alone (Model 1) produces rather poor model results. We realised that the set of these variables used is very limited and in the next approach, these variables must be extended, for example, by the place of residence (i.e., big city, small city, countryside), income level, assets and liabilities held and family status. Nevertheless, explanatory variables, other than socio-demographic ones, must be introduced. The inclusion of consumers' financial knowledge (Model 2) and knowledge of consumer rights (Model 3) has virtually no effect on the level of prediction. A significant improvement is produced with the use of TPB. Two scales, that is, attitudes and perceived control (Models 4 and 5), significantly increased Nagelkerke's pseudo-R^2 and AUC to levels of 0.25 and 0.76, respectively. However, a sufficient level of results is obtained only with the introduction of norms (Model 6), which is expressed by Nagelkerke's pseudo-R^2 = 0.407 and AUC = 0.831. Norms introduced last in the hierarchical models became—together with age range—the most important predictor over the other TPB scales. However, as long as norms are not introduced into the model, the other TPB scales, namely, attitudes and perceived control, can contribute significantly to the prediction of intention. This unique role of norms in predicting purchase intention is verified using another hierarchy of logistic regression models (Table 9). This time, in the first step, that is, Model 7, only those statistically significant variables in Model 6, that is, the norm index and the age range, are used as explanatory variables.

Table 9 Estimated Logistic Regression (Verification of the Norms' Importance)

		Model 7			*Model 8*			*Model 9*		
Variable		***B***	***SE***	***OR***	***B***	***SE***	***OR***	***B***	***SE***	***OR***
Constant		−5.833 ***	0.892	0.003	−6.015 ***	0.921	0.002	−5.429 ***	1.24	0.004
Age range	*(base 16–29 years old)*	***			***			***		
	30–44 years old	0.805	0.478	2.238	0.812	0.482	2.254	0.852	0.487	2.344
	45–59 years old	0.901	0.536	2.463	0.905	0.538	2.471	0.889	0.540	2.433
	60 years old and above	2.339 ***	0.527	10.375	2.397 ***	0.530	10.994	2.283 ***	0.553	9.804
Norms		0.319 ***	0.892	1.376	0.291 ***	0.065	1.337	0.315 ***	0.075	1.371
Attitudes					0.052	0.058	1.054	0.053	0.058	1.055
Control								−0.047	0.069	0.954
-2LL		191.3			190.5			190.0		
Joint significance test		Chi2 = 51.03 df = 4 $p < 0.001$			Chi2 = 51.84 df = 5 $p < 0.001$			Chi2 = 52.32 df = 6 $p < 0.001$		
Nagelkerke pseudo-R^2		0.325			0.329			0.332		
Hosmer and Lemeshow test		*p = 0.713*			*p = 0.715*			*p = 0.342*		
Classification accuracy		77.2%			77.2%			77.7%		

*Notes: *** p < 0.001 ** p < 0.01 *p < 0.05*

The two explanatory variables (i.e., age range and norm index) cover the vast majority of the variance in intention explained by Model 6. Nagelkerke's pseudo-R^2 takes the value of 0.325, and the classification accuracy in the respondent group is 77.2%. The introduction of the next TPB variables, namely, attitude and perceived control indexes (Models 8 and 9), shows no remarkable change, and the only statistically significant explanatory variables are age range and norm index. In summary, Ajzen's TPB appears to be beneficial for explaining consumer intentions in the financial service market. When analysing the importance of each of the TPB scales separately, they all have a significant effect on respondents' declared purchase intentions. All three TPB scales simultaneously in the analysis show that norms can explain what attitudes and perceived control together are explaining and more. This direct and strong influence of norms on respondents' intentions may exhibit important implications. Psychological factors may be more important than financial education, and even educated consumers are psychologically conditioned (most strongly by social norms).

5. Conclusions

Understanding what influences consumers in the financial services market is a complex issue and depends on many factors that have not been studied in depth in the financial literature. The research conducted shows that Ajzen's TPB aids in filling the gap in research on the determinants of intention to purchase a new financial service, as it considers an important and difficult-to-study psychological aspect. We believe that certain socio-demographic characteristics may be important in explaining consumer behaviour in the financial service market, and we are aware that we only considered a few of them in our study. However, we have focused on factors of a psychological nature, as we perceived that their influence on behavioural intentions can be crucial. We have realised that our sample is rather small and seems to be targeted at young people, women and people with higher education (see Table 1). Therefore, our sample cannot be considered representative of the entire population. Despite this bias, we believe that the results obtained will also serve as a valuable contribution to the preparation of the next study, while at the same time entitling us to cautious conclusions regarding the following hypotheses presented in the introduction: socio-demographic determinants cannot fully explain consumer behaviour in the financial service market, and psychological factors must be considered.

Our study mainly aimed to determine whether TPB explains purchase intention for new financial products and whether age range, gender, professional activity, education level, financial knowledge and knowledge of consumer law are also important determinants.

Our results show that among the socio-demographic characteristics we selected, only the age of the respondent is significant. We have found, similar as Cucinelli et al (2016), that financial literacy and knowledge of consumer laws have no noticeable effect on respondents' intentions. Psychological factors are of key importance in explaining intentions, for which we use the scales in Ajzen's theory as explanatory variables. Separately, each TPB scale has a significant effect on respondents' intentions, which allows us to conclude that consumers' decisions to purchase a new financial service are influenced by all psychological factors: social

norms, attitudes and perceived control. However, when we examined their combined influence, we found that considering only social norms allowed us to ignore the other TPB scales. These results are consistent with a stream of research (e.g., Kam et al., 2010) in which psychosocial support—a factor indicating dependence on society and those close to the consumer—is a fundamental condition for consumer functioning. The importance of the transmission of norms in the process of primary socialisation, which creates interpretative and motivational patterns for subsequent generations, is particularly noteworthy. Furthermore, in the process of socialisation, internalisation of norms occurs; that is, certain principles and values that are passed on by the family during upbringing are subconsciously treated as our own norms in this context function as a representation of social expectations existing in our minds. This perspective results in values becoming cognitive structures and thus having a considerable influence on the perception of reality and choices made. This approach reflects Archer's theory of agency, which shows that, on the one hand, structures, socialisation and society have a significant influence on our development and on the other hand, members of society transmit to us the values we have adopted from others (Archer, 2000, 2013, 2019).

The results obtained indicate that social norms are the dominant factor for the respondents and supersede—in our research perspective—the attitudes that are unstable in the respondents and hence providing greater influence of norms in the aspects discussed than attitudes that have not been adequately established among the respondents. The disappearance of the influence of attitudes is explained by the operation of Weber's mechanism of appropriation, as the behavioural aspect in attitudes, which we investigated to the greatest extent in the questionnaire formulations, comes from the nationalization of social norms (Weber, 2002).

Social norms also displace perceived control, which, based on the structure of TPB theory, may be more reflected in respondents' behaviour than as a determinant of intention, indicating that past experiences have less influence on current intentions to acquire new financial services. We also note Weber's appropriation mechanism with respect to perceived control.

If our findings are correct, misguided consumer decisions may result from a misalignment of existing social norms with the way the market operates, and it may explain some of the dysfunctional behaviour of large consumer groups, leading to the popularity of foreign currency mortgages.

The results obtained may be an important indication for consumer protection institutions on why we do not observe the translation of consumer education (in terms of financial literacy and consumer rights) into good decision making. Perhaps the right approach to improving consumer protection is to provide additional effort into changing socially acceptable norms. From our perspective, the emergence of new social norms that raise the importance of a responsible approach to assessing the risks and long-term consequences of acquiring a financial service may be a necessary direction for consumer protection efforts. In the context of considering effective consumer protection in the financial service market, we indicate that financial education cannot be effective because financial knowledge and awareness of consumer rights do not directly affect the intention to purchase new products, and the creation of effective institutional protection policies is not possible without a permanent change in social norms that affect consumer behaviour.

APPENDIX

Imagine that you will be purchasing a financial service in the near future. Indicate your level of agreement/disagreement with the following statements?

	Statement	TPB scale	Explanation	Variable in model
1	'It is worth taking advantage of various opportunities and promotions in the field of finance'	Norms	Social expectations regarding the use of opportunities and promotion in the financial area	N1
2	'Before selecting a financial service, I always review the solutions available on the market'	Control	Conviction about getting acquainted with the market offer before choosing a financial service	C1
3	'When choosing a financial service, it is important for me to understand how it works'	Control	Belief in understanding how a financial service works	C2
4	'I am open to new financial services'	Control	Belief in openness to new financial product	C3
5	'I am willing to take risks in order to benefit more from financial services'	Attitudes	Attitudes towards taking risks for greater benefits	A1
6	'A financial service should be purchased on the basis of our own knowledge'	Norms	Social expectations regarding the use of own knowledge when choosing a financial product	N2
7	'It is worth taking risks because you can earn more this way'	Norms	Social expectations regarding risk taking for higher earnings	N3
8	'You should always look for opportunities to earn more'	Norms	Social expectations regarding the search for earning opportunities	N4
9	'I enjoy living beyond my means'	Attitudes	Attitude towards extravagance when spending money	A2
10	'I believe that financing some expenses with credit is more cost-effective than paying with your own money'	Attitudes	Attitude towards borrowing for certain expenses	A3
11	'I often run out of funds before my next wages are paid'	Attitudes	Attitude towards poor budget management	A4
12	'I believe that my choices so far regarding financial services have been appropriate'	Control	Belief in efficiency in seeking opportunities and financial advancement	C4
13	'I believe I can spot opportunities (e.g., search for promotions, market opportunities, bargains) in the field of financial services'	Control	Belief in the appropriateness of past choices of financial products	C5

Table A1 Statements Employed to Determine the Theory of Planned Behaviour (TPB) Scales

	N = 187	*Correct answers*	
		number	*%*
Q 1.	You want to deposit your savings for a year, and you have a choice of two products: an annual deposit and a semi-annual deposit, with the same nominal interest rate of 4% per annum. Which one will be more beneficial for you, assuming that the interest rates on the deposits do not change during the year?	122	61.0%
	A.1.1. annual deposit		
	A.1.2. semi-annual deposit		
	A.1.3. both are equally favourable		
Q 2.	The bank offers you a three-month deposit with interest compounded monthly. If there was no compounding the product offered to you would be:	135	67.5%
	A.2.1. more beneficial		
	A.2.2. less beneficial		
	A.2.3. no difference		
Q 3.	You set up a deposit with a bank. Determine the effect of the capital gains tax on your income. Your interest income will:	142	71.0%
	A.3.1. decrease		
	A.3.2. increase		
	A.3.3. remain unchanged		
Q 4.	The variable interest rate on the loan is specified as:	78	39.0%
	A.4.1. bank margin only		
	A.4.2. sum of bank's margin and reference rate (e.g., WIBOR or LIBOR)		
	A.4.3. sum of bank's margin, reference rate and annual percentage rate of charge (APRC)		
Q 5.	Assume that you have taken out a consumer loan for two years at an interest rate of 5% per annum. On the date of disbursement, you paid the bank a commission of 2% of the loan amount. Which constitutes a greater cost to you?	130	65.0%
	A.5.1 commission		
	A.5.2. interest		
	A.5.3. commission is not included in the cost of the loan		
Q 6.	The loan instalment represents:	177	88.5%
	A.6.1. repayment of the principal		
	A.6.2. repayment of interest		
	A.6.3. repayment of both principal and interest		
Q 7.	If there is an increase in goods prices (inflation), then the cost of credit can be expected to:	127	63.5%
	A.7.1. decrease		
	A.7.2. increase		
	A.7.3. remain unchanged		
Q 8.	If the money market interest rates rise, how will this affect the cost of credit for individuals?	145	72.5%
	A.8.1. increase		
	A.8.2. decrease		
	A.8.3. remain unchanged		
Q 9.	If you take out a loan combined with insurance against credit risk, the cost of your loan, compared to a non-insured one will be:	139	69.5%
	A.9.1. higher		
	A.9.2. lower		
	A.9.3. equal		
Q 10.	What can affect a consumer's creditworthiness?	80	40.0%
	A.10.1. number of credit inquiries at banks		
	A.10.2. posts on social networking portals		
	A.10.3. both of the above answers are correct		

Table A2 Test of Financial Literacy

	N = 187	*Correct answers*	
		Number	*%*
Q 1.	Who provides specialist advice on consumer redress in relation to financial services?	127	63.5%
	A.1.1. the National Bank of Poland		
	A.1.2. Financial Supervisory Authority		
	A.1.3. Financial Ombudsman		
Q 2.	If the financial service does not meet the consumer's expectations and the contract was made over the telephone, the consumer	127	63.5%
	A.2.1. may not terminate the contract		
	A.2.2. may terminate the contract within 14 days		
	A.2.3. may terminate the contract within 30 days		
Q 3.	If the consumer has withdrawn from the contract, there is:	42	21.0%
	A.3.1. no obligation to pay an excessively high contractual penalty		
	A.3.2. no obligation to pay the price of the product / service		
	A.2.3. obligation to pay a contractual penalty		
Q 4.	The following can be reported as bad practice to the Office of Competition and Consumer Protection:	128	64.0%
	A.4.1. offering an 80-year-old person a lifetime savings plan		
	A.4.2. offering a credit card to a professionally inactive person		
	A.4.3. offering a repayment loan to an over-indebted and uncreditworthy person		
	A.4.4. all of the above		
Q 5.	The Bank Guarantee Fund (Deposit Guarantee Scheme) protects consumer deposits up to the equivalent of	200	100.0%
	A.5.1. 100.000 EUR		
	A.5.2. 100.000 PLN		
	A.5.3. 10.000 PLN		
Q 6.	In the event of abuses or irregularities in the financial services market, a consumer may seek assistance from	117	58.5%
	A.6.1. Consumer Federation		
	A.6.2. Bank Guarantee Fund		
	A.6.3. Financial Ombudsman		
Q 7.	Once the cardholder has blocked the card, who pays for unauthorised transactions?	136	68.0%
	A.7.1. the cardholder		
	A.7.2. the bank		
	A.7.3. the supervisory authority		
Q 8.	Up to what amount is the consumer financially liable for transactions made by an unauthorised person before the card was blocked?	45	22.5%
	A.8.1. EUR 50		
	A.8.2. EUR 100		
	A.8.3. no limit		
Q 9.	Whom you should report the loss of your ID card to?	145	72.5%
	A.9.1. the police		
	A.9.2. the bank		
	A.9.3. both the police and the bank		
Q 10.	When concluding a contract with a consumer over the Internet, the trader is required to confirm its contents on a durable medium. What is not a durable medium?	79	39.5%
	A.10.1. paper		
	A.10.2. e-mail		
	A.10.3. web page		

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