MODELLING THE FACTORS THAT EXPLAIN ATTITUDES TOWARDS PERSONAL FINANCIAL PLANNING

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─**Abstract**─

While personal financial planning is of significant importance in ensuring financial satisfaction in the future, an extensive search of four large online academic databases, namely EBSCOhost, Emerald, Google Scholar and Sabinet Reference revealed no evidence of a validated attitudes-towards-personal-financial-planning scale within the South African context. To address this gap in the literature, the purpose of this study was to validate attitudes towards personal financial planning as a five-factor structure within the South African context. A single cross-sectional descriptive research design was followed in this study. The study used a survey self-administered questionnaire to collect the necessary data from a convenience sample of 385 black Generation Y students enrolled at two Gauteng-based public South African university campuses. The techniques used to analyse the data included Pearson's product-moment correlation analysis, multicollinearity analysis, reliability measures and confirmatory factor analysis using the maximum likelihood method. The findings of the analysis validate that the proposed measurement model of attitudes towards personal financial planning is a five-factor structure that comprises the financial planning process, credit planning, insurance planning, investment planning and estate planning. The measurement model showed internal-consistency reliability, composite reliability, construct, convergent, discriminant and nomological validity. Moreover, the measurement model displayed no evidence of multicollinearity between the factors. In addition, the model fit indices were indicative of good model fit.

Keywords: Personal financial planning; credit planning; insurance planning; investment planning; estate planning; confirmatory factor analysis

JEL classification: B16, D14, G4

1. INTRODUCTION

Finance has been an important facet of human society since the dawn of civilisation. The effective management and planning of one's finances are regarded as the foundation for success and wellbeing that build confidence and knowledge in the lives of individuals and a nation as a whole (The Banking Association South Africa, 2018). As such, it is essential that individuals develop an all-inclusive personal financial plan to not only serve as a guide when making financial decisions, but that also underlies the effects of those decisions on other financial areas (Botha, Du Preez, Geach, Goodall, Rossini & Rabenowitz, 2012).

Personal financial planning involves a systematic and disciplined process of managing financial resources to attain personal economic satisfaction and create some degree of wealth over a specific period of time. Financial planning assists individuals to become more responsible towards disciplined investing (Balakrishnan, 2014), which is particularly important given the increasingly complex and uncertain financial, economic and political environments (Aprea, Wuttke, Breuer, Koh, Davies, Greimel-Fuhrmann & Lopus, 2016). Insecurity and threats, such as diminishing buying power, rising interest, tax and inflation rates as well as low employment rates all have an influence on the financial security and independence of an individual (Shim, Xioa, Barber & Lyons, 2009). This, in combination with low consumer savings and high debt, highlights the importance of efficient personal financial planning.

While many individuals believe that personal financial planning is only necessary for the wealthy members of society, this belief cannot be further from the truth (Swart, 2012). Personal financial planning is critical for everyone, regardless of an individual's level of personal wealth (Fünfgeld & Wang, 2009). This is because financial planning prepares individuals from all spheres of society to better predict the future, manage uncertainties and achieve financial goals at every stage of life (Balakrishnan, 2014). In addition, financial planning ensures that individuals spend within their means, invest wisely and optimally (Gitman & Joehnk, 2008), improve their living standards, mitigate the risk of financial losses and achieve long-term prosperity (Koh & Fong, 2011).

The financial planning process typically involves five steps. First, the financial position and situation of the individual are assessed. Then, financial goals are set, followed by the development of a financial plan to ensure that the goals are achieved. Thereafter, the financial plan is implemented. Lastly, the plan is

monitored and reassessed to evaluate whether the individual is still on the path of goal attainment (Balakrishnan, 2014). An effective personal financial plan should incorporate a number of financial planning areas, including credit, insurance, investment and estate planning. Credit planning entails carefully taking on debt to satisfy individual needs and attain financial goals, while managing the inflow and outflow of financial resources using a personal financial budget (Swart, 2012). Effective credit planning strategies include paying off financial obligations with the highest interest rate first or selling inessential assets to settle long-term obligations such as mortgage loans and in doing so reap the benefit of capital savings (Botha et al., 2012). Insurance planning involves identifying, scrutinising and prioritising risks, followed by the use of risk avoidance, reduction and transference strategies to minimise, monitor and control the consequences of these risks (Botha, Du Preez, Geach, Palframan, Rossini & Rabenowitz, 2011). Investment planning comprises the process of purposefully allocating funds in order to yield returns. It is considered one of the main personal financial planning areas as this planning also forms an integral part of retirement planning, has a direct influence on financial security as well as the attainment of short-, medium- and long-term goals (Swart, 2012). The process of organising, managing, securing and dispositioning an individual's estate so that the individual, his or her family, as well as other beneficiaries benefit and continue to benefit from the individual's estate and possessions during the lifetime of the individual and after death is referred to as estate planning (Botha et al., 2012).

Evidence in the literature indicates that individuals with strong perceptions and positive financial attitudes seem to be more satisfied with their financial standings (Joo & Grable, 2004) and that financial attitudes contribute to predicting financial planning practices (Shim et al., 2009). While the findings of internationally published studies suggest that individuals perceive financial planning as important, show interest in developing a financial plan (Murphy & Yetmar, 2010), recognise the importance of budgeting (Bamforth, Jebarajakirthy & Geursen, 2017) and managing credit and savings (Akben-Selcuk, 2015), an extensive search of four large online academic databases, namely EBSCOhost, Emerald, Google Scholar and Sabinet Reference revealed no evidence of a validated attitudes-towards-personal-financial-planning scale within the South African context.

2. PURPOSE OF THE STUDY AND RESEARCH QUESTION

To address the gap in the literature, the purpose of this study was to validate attitudes towards personal financial planning as a five-factor structure that consists of the financial planning process, credit planning, insurance planning, investment planning and estate planning amongst black Generation Y students within the South African context. Black Generation Y students were considered an appropriate sample to validate the attitudes-towards-personal-financial-planning scale for a number of reasons. The Generation Y cohort is demarcated as those individuals born between 1986 and 2005 (Markert, 2004). This cohort represented approximately 36 percent of the South African population in 2017, of which a staggering 84 percent were made up of black individuals (Statistics South Africa, 2017). The significant size of the black Generation Y cohort therefore renders them an important and lucrative market segment. Of particular importance is the Generation Y university student cohort. This is because tertiary educated individuals are likely to enjoy a higher future income, spending power and social status within society (Bevan-Dye & Akpojivi, 2016), as well as bear more financial responsibility and risk than previous generations (OECD, 2014). Therefore, the research question addressed in this study is as follows:

- Are attitudes towards personal financial planning amongst black Generation Y students a five-factor structure comprising the financial planning process, credit planning, insurance planning, investment planning and estate planning?

3. METHODOLOGY

3.1. Research design and approach

A descriptive, single cross-sectional research design was followed in this study.

3.2. Sample

The population targeted for this study was demarcated as black Generation Y students who were between the ages of 18 and 24 years enrolled at public higher education institutions (HEIs) in South Africa. The 26 South African public HEIs made up the sampling frame. Using judgement sampling, this initial sampling frame was reduced to two HEI campuses based in Gauteng. A non-probability convenience sample of 250 students across each of the two campuses was taken. Given that the measurement model outlined in this study comprised fewer than

seven latent factors, each of which had three or more variables, the sample size of 500 students was considered adequate (Hair, Black, Babin & Anderson, 2010).

3.3. Measurement instrument and data collection procedure

The study used a survey self-administered questionnaire to collect the necessary data. The financial planning scale (Boon, Yee & Ting, 2011) was adapted to measure black Generation Y students' perceptions pertaining to the financial planning process (four items), credit planning (three items), insurance planning (three items), investment planning (four items) and estate planning (four items). The scaled responses were recorded on a six-point Likert-type scale ranging from strongly disagree (1) to strongly agree (6). The questionnaire also included a section designed to gather the students' demographic information as well as a cover letter. The cover letter outlined the purpose of the study and promised the students that their responses would be treated as confidential, only to be outlined in the form of statistical data.

In terms of the data collection procedure followed, each of the two HEI campuses was contacted to ask for approval to distribute questionnaires to their students. After approval was granted, students, trained as fieldworkers, used the mall-intercept survey method to distribute the questionnaires to the students for voluntary completion.

3.4. Data analysis

The data was analysed using the IBM Statistical Package for Social Sciences (IBM SPSS) and Analysis of Moment Structures, Version 25. The techniques used to analyse the data included Pearson's product-moment correlation analysis, multicollinearity analysis, reliability measures and confirmatory factor analysis using the maximum likelihood method.

4. RESULTS

Of the 500 questionnaires that were distributed, 115 questionnaires did not meet the target population specifications. This left 385 viable questionnaires for further analysis and resulted in a response rate of 77 percent. The sample was made up of participants aged between 18 and 22, and consisted of more females than males. The majority of the sample studied towards a degree, of which more participants were enrolled for a BCom degree, followed by a BA degree. A total of 44.7 percent of the participants were enrolled for a diploma. In terms of year of study, the majority of the participants were in their first year of study, followed by those

in their third year of study. The sample was made up of participants from eight of South Africa's nine provinces and each of the country's 11 official language groups. A detailed description of the sample is given in Table 1.

Table 1. Sample description

Age	Percent (%)	Language	Percent (%)	Province	Percent (%)
18	10.4	Afrikaans	1.6	Eastern Cape	2.6
19	20.5	English	1.8	Free State	7.0
20	24.4	isiNdebele	0.8	Gauteng	60.3
21	31.2	isiXhosa	9.1	KwaZulu-Natal	2.1
22	13.5	isiZulu	13.8	Limpopo	14.0
Gender		Sepedi	10.1	Mpumalanga	5.5
Female	62.6	Sesotho	31.9	Northern Cape	0.8
Male	37.4	Setswana	13.5	North West	7.0
Field of study		SiSwati	3.4		
BCom	23.9	Tshivenda	4.9		
BSc	9.1	Xitsonga	8.6		
BA	17.4	**Year of study**			
Degree	2.6	1st year	41.8		
Diploma	44.7	2nd year	24.4		
		3rd year	33.8		

A correlation matrix of Pearson's product-moment correlation coefficients was constructed to evaluate the nomological validity of the proposed measurement model and to assess whether there were any multicollinearity concerns. The correlation matrix is outlined in Table 2.

Table 2. Correlation matrix

Latent factors		F1	F2	F3	F4
Financial planning process	F1				
Credit planning	F2	0.274[**]			
Insurance planning	F3	0.291[**]	0.189[**]		
Investment planning	F4	0.359[**]	0.233[**]	0.389[**]	
Estate planning	F5	0.126[*]	0.103[*]	0.278[**]	0.320[**]

[**] Statistically significant at $p \leq 0.01$ (2-tailed)
[*] Statistically significant at $p \leq 0.05$ (2-tailed)

As shown in Table 2, there were statistically significant positive relationships between each of the latent factors of the proposed model, which suggests nomological validity (Hair et al., 2010). Moreover, given that none of the

correlation coefficients were above the recommended cut-off level of 0.80, the possibility of multicollinearity is eliminated (Field, 2009).

A five-factor measurement model was specified for confirmatory factor analysis that included the financial planning process (four indicators), credit planning (three indicators), insurance planning (three indicators), investment planning (four indicators) and estate planning (four indicators). For model identification purposes, the first loading on each of the five latent factors was fixed at 1.0, which resulted in 171 distinct sample moments and 46 parameters to estimate, leaving 125 degrees of freedom (df) based on an over-identified model. Figure 1 specifies the proposed measurement model.

Figure 1. Specified measurement model
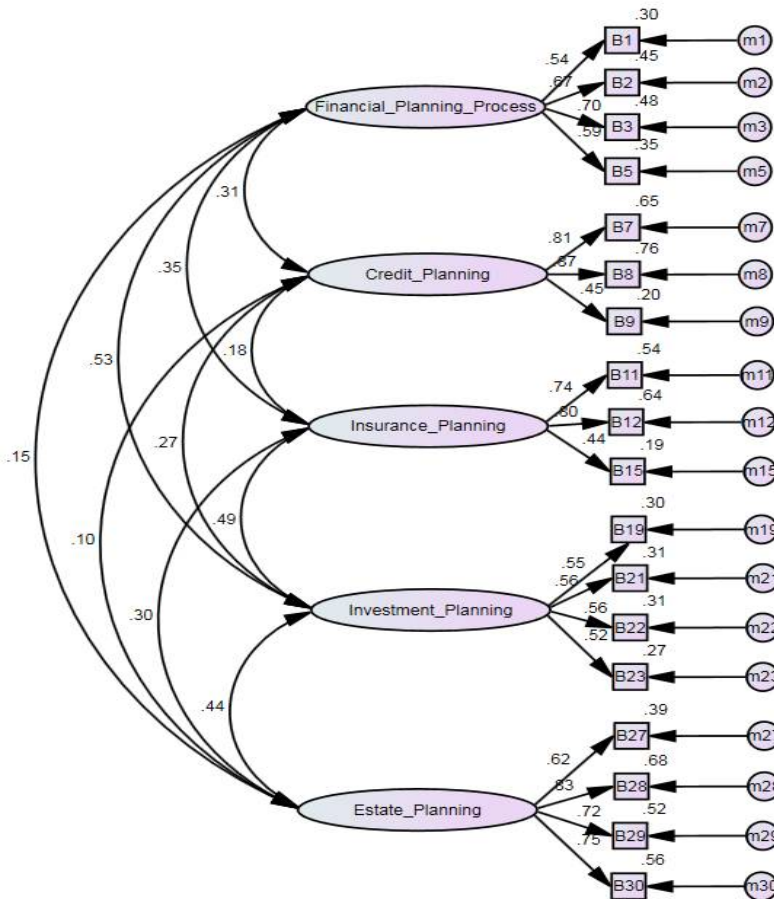
The model was examined for any problematic estimates, such as standardised loading estimates above 1.0 or below -1.0 and negative error variance estimates (Heywood cases) (Hair et al., 2010). The standardised loadings, error variances, correlations, composite reliability (CR), average variance extracted (AVE), the square-root of the AVE ($\sqrt{AVE}$) and the Cronbach alpha values are reported in Table 3.

Table 3. Measurement model estimates

Latent factors		Standardised loading estimates	Error variance estimates	CR	AVE	√AVE	Cronbach's alpha
Financial planning process	(F1)	0.54	0.30	0.80	0.50	0.71	0.71
		0.67	0.45				
		0.70	0.49				
		0.59	0.35				
Credit planning	(F2)	0.81	0.65	0.74	0.50	0.71	0.74
		0.87	0.76				
		0.45	0.20				
Insurance planning	(F3)	0.74	0.54	0.74	0.50	0.71	0.70
		0.80	0.64				
		0.44	0.19				
Investment planning	(F4)	0.55	0.30	0.80	0.50	0.71	0.63
		0.56	0.31				
		0.56	0.31				
		0.52	0.27				
Estate planning	(F5)	0.62	0.39	0.80	0.50	0.71	0.82
		0.83	0.68				
		0.72	0.52				
		0.75	0.56				
Correlations	F1↔F3: 0.35	F2↔F4: 0.27	F1↔F4: 0.53	F1↔F5: 0.15		F1↔F2: 0.31	
	F3↔F4: 0.49	F4↔F5: 0.44	F2↔F3: 0.18	F3↔F5: 0.30		F2↔F5: 0.10	

The evidence in Table 3 shows that there were no problematic estimates. Moreover, with each latent factor returning a Cronbach alpha value above the 0.60 level and a CR value above the 0.70 level suggests that the factors exhibit internal-consistency reliability and composite reliability. In terms of construct validity, all loading estimates exceeded the cut-off level of 0.50 (Malhotra, 2010), with the exception of two estimates. The removal of these two latent indicators would result in the latent factor comprising two indicators, which would subsequently result in an under-identified model. Therefore, since these two loadings were relatively close to 0.50, a decision was made to retain the two latent indicators. With regard to convergent validity, all the AVE values were calculated at the 0.50 cut-off level. There is also evidence of discriminant validity given that

the square-root of the AVE values was larger than the correlation values (Hair et al., 2010).

To evaluate the model fit, several fit indices were used, including the chi-square statistic, the standardised root mean residual (SRMR), the root mean square error of approximation (RMSEA), the goodness of fit index (GFI), incremental fit index (IFI), comparative fit index (CFI) and the Tucker-Lewis index (TLI). A non-significant chi-square value, together with GFI, IFI, CFI and TLI values equal to or greater than 0.95, and an SRMR value of 0.05 or lower, as well as an RMSEA value of 0.08 or less indicate good model fit (Byrne, 2010). Although a significant chi-square statistic [(201.05 (df = 125, p < 0.000)] was computed, the other fit indices proposed a well-fitting model with SRMR = 0.05, RMSEA = 0.04, GFI = 0.95, IFI = 0.96, TLI = 0.95 and CFI = 0.96.

Since the specified measurement model was found to be a well-fitting model that showed acceptable internal-consistency reliability, composite reliability, as well as convergent and discriminant validity, it may be deemed appropriate to test a structural model. The proposed structural model will seek to determine whether credit, insurance, investment and estate planning have a direct positive influence on attitudes towards the financial planning process.

5. LIMITATIONS AND FUTURE RESEARCH

One significant caveat is that a non-probability convenience sample was used in this study. Therefore, great care should be exercised in generalising the results to the entire population. Moreover, this study followed a single cross-sectional research design, which offers a single moment in time. A longitudinal research design is therefore recommended for future research.

6. CONCLUSION

The purpose of this study was to determine whether attitudes towards personal financial planning is a five-factor structure. The results of the confirmatory factor analysis using a black Generation Y student sample validated that attitudes towards personal financial planning are a five-factor structure that consists of the financial planning process, credit planning, insurance planning, investment planning and estate planning. The measurement model showed internal-consistency reliability, composite reliability, as well as construct, convergent and discriminant validity. Moreover, the measurement model displayed no evidence of multicollinearity between the factors. In addition, the model fit indices were indicative of good model fit. As such, the results of this study suggest that this

five-factor model is a valid measure of attitudes towards personal financial planning within the South African context.

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