# Relationship between Attitudes towards Personal Financial Planning and Perceived Personal Financial Management Skills: A Generation Y Student Perspective

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**Abstract:** This article sought to determine the relationship between attitudes towards personal financial planning and perceived personal financial management skills among African Generation Y students within the South African context. In South Africa, the African Generation Y cohort constitutes the largest portion of the Generation Y (individuals born between 1986 and 2005) cohort. Students enrolled at tertiary institutions represent a particularly lucrative target market and powerful influential force on society given that tertiary education is correlated with potential high future earning power and social class status. A convenience sample of 500 African students across the campuses of two South African registered public higher education institutions (HEIs), located in the Gauteng Province, was taken. Structured, self-administered questionnaires were used to measure African Generation Y students' attitudes towards personal financial management as well as perceived personal financial management skills. Data analysis included t-tests and Pearson's product-moment correlation coefficient. The findings suggest that the target market exhibits a significant positive attitude towards personal financial planning and perceives to be skilled in personal financial management. A strong positive relationship was found between attitudes towards personal financial planning and perceived personal financial management skills.

**Keywords:** Attitude, personal financial planning; personal financial management skills; Generation Y students; South Africa

**JEL Classification:** M21

## 1. Introduction

Personal financial management is becoming more essential owing to the constant macroeconomic fluctuations threatening financial security at retirement (Chinen & Endo, 2012). The steady increase in the aged population, coupled with a longer life expectancy, accentuates the need and importance of well-planned personal financial planning. Individuals should therefore invest their assets and personal income as efficiently as possible to guarantee economic security (Lai & Tan, 2009).

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To attain financial wellness, Joo and Grable (2003) advise following an expenditure plan, maintaining low debt levels and accumulating savings or setting up a retirement plan. Worryingly though, James et al. (2002) indicate that many households, including students, show little concern about their future financial security and wealth, thereby taking unnecessary chances with their financial freedom. This may be because students become apprehensive when thinking about financial issues. Swart (2012) attributes this to a lack of comprehension about the importance of financial planning. As a result, students are likely to be challenged with high credit card debt (Norvilitis et al.; 2006), ineffective record keeping (Chen & Volpe, 1998) and psychological problems such as high financial stress and anxiety (Joo & Grable, 2004). Because students will have to make increasingly complex financial decisions, such as deciding on homeownership and investments (Rutherford & Fox, 2010), it is important that they have a positive attitude towards financial planning and are equipped with the necessary financial skills (Falahati et al.; 2011), thereby ensuring effective decision-making and financial wellness in both the short- and long term (Rutherford & Fox, 2010).

There is a dearth of published literature on the South African Generation Y cohort's (includes individuals born between 1986 and 2005) (Markert, 2004) consumer behaviour in general, particularly concerning the significantly sized African Generation Y cohort's attitudes towards personal financial planning and their perceived personal financial management skills. Statistics indicate that the African Generation Y cohort represented 32 percent of South Africa's population in 2015 and 84 percent of the country's total Generation Y cohort (StatsSA, 2015). This study specifically focused on African students, as a tertiary qualification is generally associated with a higher future earning potential and higher social standing within a community (Schiffman et al.; 2010). This, combined with the significant size of the African Generation Y cohort, makes the student portion of this cohort a lucrative market segment and should be of particular interest to a wide spectrum of financial institutions involved in personal financial planning and management, including insurance companies, investment firms and retail banks.

## 2. Literature Review

### 2.1. Personal Financial Planning

The majority of people believe that personal financial planning is only important for wealthy individuals. However, everyone should embark on personal financial planning, regardless of the level of personal wealth. This is because personal financial planning provides an individual with the necessary tools to spend and invest more efficiently (Gitman & Joehnk, 2008), as well as improve their standard of living, accumulate wealth over time and mitigate possible financial ruin (Koh &

Fong, 2011). In addition, by effectively engaging in personal financial planning, an individual can enjoy a number of benefits, especially when faced with financial challenges, opportunities and responsibilities. These benefits include lower insurance premiums and income taxes, minimal credit costs, acceptable mortgage rates, higher investment returns and better retirement planning (Garman & Forgue, 2008).

Personal financial planning involves organising an individual's financial and personal data in order to develop a strategic plan that will assist an individual with managing their income, assets and liabilities to ensure that short- and long-term financial goals are met (Swart, 2012). Knowledge on money matters and the financial planning process are fundamental for the successful planning of an individual's personal finances (Boon et al.; 2011). This is because effective personal financial planning necessitates continuously trying to forecast future events and paying attention to future financial needs as they arise as early as possible (Swart, 2009). In order to do personal financial planning and develop a successful financial plan, it is essential that individuals are knowledgeable on a number of personal financial planning areas, given that each area has potentially far-reaching positive and negative financial implications. While the financial planning areas include emigration, retirement, healthcare, credit, insurance, investment, estate, income tax and career planning (Swart, 2012), this study only concentrated on credit, insurance, investment, retirement and estate planning.

Credit planning relates to moderation, affordability and debt management to avoid long-term negative financial repercussions (Swart, 2012) and involves, among others, paying off overdrafts, loans, store and credit cards with the highest interest rate first or cashing in investments to settle debts (Botha et al.; 2012). Insurance planning comprises identifying, examining and prioritising risks and subsequently developing strategies that will minimise, monitor and control the consequences of unforeseen circumstances, such as taking out health insurance and funeral cover (Botha et al.; 2011). Investment planning involves investing funds in financial assets to generate an income, such as investing in retirement annuities, and is viewed as one of the primary areas of personal financial planning owing to it being an integral part of retirement planning and a direct inducement to insurance planning (Swart, 2012). Retirement planning relates to saving a specific amount of money while working to ensure an income after retirement age (Van Gijsen, 2002). It is important that an individual saves and invests as much money as possible, as soon as possible and for as long as possible, thereby ensuring a greater amount available for the retirement years (Biehler, 2008). Investment vehicles for retirement can include unit trusts, endowment policies and fixed deposits (Swart, 2012). Estate planning entails organising, managing and securing an individual's estate to ensure that an individual or an individual's family benefits to the maximum from the individual's assets during his or her lifetime (Botha et al.; 2012).

Personal financial planning is not an unknown concept, particularly in this volatile and uncertain economic and financial environment in which people have to manage their finances (Swart, 2012). It is therefore worrying that some individuals, including students, do not do personal financial planning. A study undertaken by the ANZ Banking Group in Australia and New Zealand revealed that 37 percent of the participants (aged between 18 and 70 years and older) are unaware of the amount of money required to fund a decent retirement (Louw, 2009). In South Africa, research has shown that less than one in every ten individuals is financially free on retirement. These statistics infer that most individuals fail to understand what personal financial planning entails or how to embark on such planning. A major challenge facing South Africa is the financial empowerment of the South African population. This may be attributed to the South African educational system's failure to cater for the structured and targeted education and training of school children, students and adults in personal financial planning, consequently leading to a financially uneducated society that has no insight into its financial activities.

### 2.2. Financial Management Skills

In order to manage debt, spend within your means, build-up savings and secure financial freedom at retirement (Chinen & Endo, 2012), it is essential that individuals, including students, manage and plan everyday life activities through developing personal financial management skills (Falahati et al.; 2011). Leskinen and Raijas (2006) explain that financial knowledge and understanding lays the foundation for the successful application of financial management skills, and that financial skills are influenced by an individual's attitude towards money and personal financial planning, such as spending and saving. Following this explanation, Kempson et al. (2006) define financial skills as an individual's capability to use their financial knowledge and understanding in practice in order to make well-informed financial decisions, assess financial information, draw comparisons between different financial products and services or courses of action, as well as predict the expected and unexpected. As such, financial skills enable individuals to plan, monitor, manage and resolve both financial problems and opportunities.

Typically, university students take little responsibility and accountability for managing their own personal finances, starting their tertiary education journey with high tuition costs (Goetz et al.; 2011) and limited personal financial management skills (Chinen & Endo, 2012). This is disconcerting, as many university students will likely have to face financial decisions that are unknown to them in a new environment (Goetz et al.; 2011) and experience financial independence for the first time, without direct parental support and supervision (Sabri & MacDonald, 2010). Furthermore, the consumer economy entices students to spend, the Internet facilitates easy shopping, and credit cards provide students with a readily available and transparent means of borrowing money, all of which pose threats to financially incapable students' financial and economic well-being (Shim et al.; 2009). This, coupled with limited financial skills and experience, makes students particularly vulnerable to the aggressive marketing strategies of financial institutions (Borden et al.; 2007). Shim et al. (2009) opine that while some students may graduate with the inability to manage their debt and spending, others may have accrued some degree of capital, obtained satisfactory credit scores and developed the ability to use their financial skills effectively. Nevertheless, Cude et al. (2006) highlight that students are often perceived as a high-risk group concerning their financial stability. As such, it is important to determine and assess students' personal financial management skills.

Studies conducted to determine students' personal financial management skills are limited in international markets. In the United States of America, Chavez (2015) discovered that 57 percent of the 751 American students surveyed perceived their financial skills to be good or excellent, followed by those who rated theirs as fair (31%) and poor or terrible (12%). Of the 2 519 students studied in Malaysia, Falahati et al. (2011) found that 57 percent of the students perceived themselves as being somewhat skilled in personal financial management, followed by those who perceived themselves as skilled (31%) and those who have indicated having no personal financial management skills at all (6%). In South Africa, no similar or related studies have been conducted to determine African Generation Y students' perceived personal financial management skills.

### 2.3. Generation Y Cohort

Dividing society into generational cohorts is important for market segmentation. This is because each age group shares experiences brought about by unique circumstances and environmental forces prevalent during their developmental years, which subsequently shapes their consumer behaviour, setting them apart from other generations (Twenge & Cambell, 2008). Unlike other generational cohorts, the Generation Y cohort was the first generation born into an Internet-facilitated digitally connected world, mobile phones, convergent technologies and several multimedia platforms (Shaw & Fairhurst, 2008), making this generation the most technologically astute generation alive today (Ferguson, 2008). Other characteristics include career-oriented (Wilson & Gerber, 2008), entrepreneurial, ambitious, individualistic (Kane, 2012), demanding (Cox et al.; 2008) and self-confidence (Brier, 2004).

Generation Y is likely to be upcoming economic generators and are perceived as the wealth accumulators of the future (DeRogatis, 2013). This generation represents the next big generation with influential aggregate spending (Cui et al.; 2003) and 200 billion American dollars in purchasing power. In 2015, it was estimated that this generation's spending would reach 2.5 trillion American dollars. By 2018, this cohort's income is expected to reach 3.4 trillion American dollars worldwide (Bleedorn, 2013), suggesting that this generation's influence and affluence are growing, together with their financial appetite (Cox et al.; 2008).

A key shared experience to have influenced African Generation Y in South Africa is that they were the first generation brought up in a period free of discrimination and segregation, allowing them to join multi-racial schools and mix with youth from diverse backgrounds and ethnic groups (Bevan-Dye et al.; 2012). As such, African Generation Y individuals have more opportunities in terms of education, careers and wealth creation available to them compared to previous generations from this racial group (De Waal, 2008). This has led to a steady increase in the African middle-class, demarcated as Black Diamonds by the UCT Unilever Institute of Strategic Marketing and TNS Research Surveys (Olivier, 2007). Sustained growth in this market segment will primarily stem from individuals of the African Generation Y cohort in general, specifically those who hold a tertiary qualification (Bevan-Dye et al.; 2009). As such, African Generation Y students signify a significant market segment to financial institutions. Consequently, it is important that financial institutions positively influence African Generation Y students' attitudes towards personal financial planning as well as engage in the development of their personal financial management skills.

## 3. Methodology

### 3.1. Target Population, Sampling Frame and Sampling Method

The target population relevant to this study was defined as full-time undergraduate African male and female students between the ages of 18 and 24 years, enrolled at South African registered public higher education institutions (HEIs) in 2013. The sampling frame comprised a list of those HEIs located in the Gauteng Province as the majority of South Africa's HEIs are situated in this province. A non-probability judgement sampling method was used to narrow this sampling frame to two HEI campuses – one from a traditional university and one from a university of technology. A non-probability, convenience sample of 500 students was taken to perform the study.

### 3.2. Measurement Instrument and Data Collection Procedure

A quantitative research approach, using a structured self-administered questionnaire, was employed to collect the required data. In order to measure African Generation Y students' attitudes towards personal financial planning as well as their perceived personal financial management skills, two scales from previously published research were used. The Financial Planning Scale developed and validated by Boon et al. (2011) was adapted and used to measure African Generation Y students' attitudes towards personal financial planning. This 30-item scale comprised six constructs, namely the financial planning process (five items), credit planning (five items), insurance planning (five items), investment planning (eight items), retirement planning (three items) and estate planning (three items). The Financial Management Skills Scale developed and validated by Falahati et al. (2011) was adapted used to elicit information on African Generation Y students' perceived personal financial management skills and included 10 items, namely managing daily expenses, managing credit/debt, managing finances to provide for future needs, time management, stress management, managing savings, and negotiating- and decision-making skills. All of the scaled responses were measured on a six-point Likert scale, ranging from strongly disagree (1) to strongly agree (6). In addition, the questionnaire included a section designed to obtain the participants' demographic information.

To establish the reliability of the questionnaire, a pilot study was done on a convenience sample of 40 students on an HEI campus that did not form part of the sampling frame. The Financial Planning Scale returned a Cronbach alpha value of 0.699 and the Financial Management Skills Scale retuned a Cronbach alpha value of 0.883, thereby signalling acceptable internal consistency reliability (Malhotra, 2010). Questionnaires were then distributed to the identified sample. Lecturers at each of the two HEIs were contacted to request permission for questionnaire completion by their students, either during lectures or after class. Fieldworkers distributed the questionnaires to those students from whom permission has been obtained and were informed that participation was strictly on a voluntary basis.

## 4. Results

Of the 500 questionnaires handed out, 385 were returned completed and usable, translating into a response rate of 77 percent. There were more 21-year-old participants in the sample, followed by 20-year-olds and 19-year-olds. The sample comprised a greater number of female participants than male participants. Concerning the participants' year of study, the majority indicated being first-year students, followed by those who indicated that they were in their third- and second year. A greater number of participants indicated Gauteng as their province of origin, followed by Limpopo. Table 1 describes the sample's participants.

**Table 1. Sample Description**

| Age | N (%) | Gender | N (%) | Year of study | N (%) | Province of origin | N (%) |
|---|---|---|---|---|---|---|---|
| 18 | 40 (10) | Male | 144 (37) | First year | 161 (42) | Eastern Cape | 7 (2) |
| 19 | 79 (21) | Female | 241 (63) | Second year | 94 (24) | Free State | 36 (11) |
| 20 | 94 (24) | | | Third year | 130 (34) | Gauteng | 196 (60) |
| 21 | 120 (31) | | | | | KwaZulu-Natal | 11 (3) |
| 22 | 52 (14) | | | | | Limpopo | 37 (11) |
| | | | | | | Mpumalanga | 21 (7) |
| | | | | | | Northern Cape | 3 (1) |
| | | | | | | North-West | 15 (5) |

In the final study, acceptable Cronbach alpha values of 0.820 and 0.818 were computed for the Financial Planning Scale and the Financial Management Skills Scale, respectively. The Cronbach alphas of the individual constructs pertaining to the Financial Planning Scale ranged between 0.289 for retirement planning, 0.524 for credit planning, 0.628 for investment planning, 0.711 for both insurance planning and the financial planning process and 0.817 for estate planning. The retirement planning construct was excluded from further analysis given its unacceptably low Cronbach alpha value. An assessment of the credit planning construct established that the removal of two items (convenience of credit cards and personal loans) would increase the Cronbach alpha to an acceptable 0.736 level.

Means above 3.5 were computed on each of the attitudes towards personal financial planning constructs in the Financial Planning Scale, as well as on perceived personal financial management skills in the Financial Management Skills Scale. In order to determine whether these calculated means were statistically significant, a one-tailed one-sample t-test was conducted. The level of significance was set at the conventional 0.05 ($\alpha = 0.05$) and the expected mean was set at mean > 3. Table 2 shows the calculated means, standard deviations, t-values and p-values.

**Table 2. Attitudes Towards Personal Financial Planning and Perceived Personal Financial Management Skills Among African Generation Y Students**

| | **Mean** | **Standard deviation** | **t-values** | **p-values** |
|---|---|---|---|---|
| Attitude: Financial planning process | 3.948 | 0.921 | 20.192 | 0.000* |
| Attitude: Credit planning | 4.187 | 1.282 | 18.156 | 0.000* |
| Attitude: Insurance planning | 4.227 | 1.001 | 24.051 | 0.000* |
| Attitude: Investment planning | 4.551 | 0.717 | 42.441 | 0.000* |
| Attitude: Estate planning | 5.142 | 0.889 | 47.275 | 0.000* |
| Financial management skills | 4.564 | 0.717 | 42.786 | 0.000* |

* Significant at the 0.05 level (1-tailed)

As indicated in Table 2, significant p-values ($p=0.000 < 0.05$) were computed, indicating statistical significance. This suggests that African Generation Y students do exhibit a statistically significant positive attitude towards the financial planning process, credit planning, insurance planning, investment planning and estate planning, as well as perceive themselves as being skilled in personal financial management.

Correlation analysis, using Pearson's product-moment correlation coefficient, was undertaken to determine whether there was a relationship between African Generation Y students' attitudes towards personal financial planning and their perceived personal financial management skills. The results are reported in Table 3.

**Table 3. Relationship between Attitudes Towards Personal Financial Planning and Perceived Personal Financial Management Skills**

| | Financial planning | Financial management skills |
|---|---|---|
| Financial planning | 1 | 0.514* |
| Financial management skills | | 1 |

*Correlation is significant at the 0.01 level (2-tailed)

The results in Table 3 show a significantly positive relationship between attitudes towards personal financial planning and perceived personal financial management skills ($r=0.514$, $p<0.01$). This infers that the more positive attitude students have towards personal financial planning, the greater their perceived personal financial management skills.

## 5. Discussion

This study set out to determine the relationship between attitudes towards personal financial planning in terms of the financial planning process, credit planning, insurance planning, investment planning and estate planning, and perceived personal financial management skills among African Generation Y students in South Africa. The findings of the study indicate that African Generation Y students have a significant positive attitude towards personal financial planning and perceive to be skilled in personal financial management, and that there is a strong positive relationship between these two constructs.

Attitudes towards estate planning were ranked the highest, followed by investment planning, suggesting that African Generation Y students perceive these two constructs as important in personal financial planning. Attitudes towards insurance- and credit planning were ranked the third and fourth highest, inferring that students perceive insurance and credit planning as valuable. Attitudes towards the financial planning process were ranked the lowest, indicating the African Generation Y students have less positive attitudes towards this construct of personal financial planning. In terms of perceived personal financial management skills, African Generation Y students perceive themselves to be highly skilled personal financial management.

With a correlation coefficient computed at 0.514, there is a strong positive correlation between African Generation Y students' attitudes towards personal financial planning and their perceived personal financial management skills. This suggests that the more positive attitude students have towards personal financial planning, the more skilled they perceive themselves to be in managing their personal finances.

The positive attitude displayed towards personal financial planning, coupled with the African Generation Y cohort representing a significant portion of South Africa's population, this cohort is likely to be in possession of the largest portion of the country's wealth as well as these individuals, epitomising the future of financial services consumption, make this cohort an important target segment for a range of financial institutions, including retail banks, investment firms, insurance companies, and the like. With a tertiary qualification, Generation Y students will possibly become opinion leaders and financial trendsetters, with a high expected earning potential. To capture and better engage with this technologically astute target segment, financial institutions should integrate digital platforms, such as mobile- and Internet banking, establish a Facebook page and design mobile phone advertisements that are appealing and familiar to this specific ethnic and age cohort.

To assess and improve African Generation Y students' personal financial management skills, universities and financial institutions should introduce financial educational programmes. These programmes should be designed in such a manner that it fosters students' critical thinking and decision-making processes and brings about change in financial behaviour.

## 6. Limitations and Future Research

Like most studies, certain limitations can be identified within this study. A non-probability convenience sampling method was used to conduct the survey. As such, the study's results should be interpreted with great care. Moreover, this study followed a single cross-sectional research design. Consequently, the study's findings lack the depth of a longitudinal study. Future research to determine whether the findings of this study would apply to participants from campuses across the South African provinces is recommended.

## 7. Conclusion

The purpose of this study was to investigate the relationship between African Generation Y students' attitudes towards personal financial management and their perceived personal financial management skills. It appears from the findings that the more positive attitude African Generation Y students have towards personal financial planning, the more skilled they perceive themselves to be in personal financial management. For marketers of financial products and services, African Generation Y students in South Africa represent an attractive market segment owing to this cohort's likely future Black Diamond status.

## References

Bevan-Dye, A.L.; Dhurup, M. & Surujal, J. (2009). Black Generation Y students' perceptions of national sport celebrity endorsers as role models. *African Journal for Physical, Health Education, Recreation and Dance.* September supplement, pp. 172-188.

Bevan-Dye, A.L.; Garnett, A. & de Klerk, N. (2012). Materialism, status consumption and consumer ethnocentrism amongst black generation Y students in South Africa. *African Journal of Business Management*, Vol. 6, No. 16, pp. 5578-5586.

Biehler, T. J. (2008). *The mathematics of money: math for business and personal finance decisions*. New York: McGraw-Hill.

Bleedorn, G. (2013). Say hello to the millennial generation. *ABA Bank Marketing*, Vol. 45, No. 1, pp. 24-28.

Boon, T. H.; Yee, H. S. & Ting, H. W. (2011). Financial literacy and personal financial planning in Klang Valley, Malaysia. *International Journal of Economics and Management,* 5(1), pp. 149-168.

Botha, M.; Du Preez, L.; Geach, W.; Goodall, B.; Palframan, J.; Rossini, L. & Rabenowitz, P. (2011). *Fundamentals of financial planning 2012*. Durban: LexisNexis.

Botha, M.; Du Preez, L.; Geach, W.; Goodall, B.; Rossini, L. & Rabenowitz, P. (2012). *The South African financial planning handbook 2012*. Durban: LexisNexis.

Borden, L.M.; Lee, S.; Serido, J. & Dawn, C. (2008). Changing college students' financial knowledge, attitudes and behaviour through seminar participation. *Journal of Family Economics*, Vol. 29, No. 1, pp. 23-40.

Brier, N. R. (2004). Coming of age. *American Demographics*, Vol. 26, No. 9, pp. 16-19.

Chavez, J. (2015). College students lack financial management skills. *Journal of Accountancy*, Vol. 220, No. 5, p. 15.

Chen, H. & Volpe, R.P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, Vol. 7, No. 2, pp. 107-128.

Chinen, K. & Endo, H. (2012). Effects of attitude and background on students' personal financial ability: a United States survey. *International Journal of Management*, Vol. 29, No. 2, pp. 778-791.

Cox, D.; Kilgore, T.L.; Purdy, T. & Sampath, R. (2008). *Catalysts for change: the implications of Gen Y consumers for banks*. http://www.deloitte.com/assets/DcomShared%20Assets/Documents/us_fsi_GenY_Consumers_april08.pdf.

Cude, B.J.; Lawrence, F.C.; Lyons, A. C.; Metzger, K.; LeJeune, E.; Marks, L. & Machtmes, K. (2006). College students and financial literacy: what they know and what we need to learn. *Eastern Family Economics and Resource Management Association*, pp. 102-109.

Cui, Y.; Trent, E.S.; Sullivan, P. M. & Matiru, G.N. (2003). Cause-related marketing: how Generation Y responds", *International Journal of Retail and Distribution Management*, Vol. 31, No. 6, pp. 310-320.

DeRogatis, N. (2013), *Financial marketing tips for attracting Gen Y*. http://k4architecture.com/financial-marketing-tips-for-attracting-gen-y/.

De Waal, M. (2008). *Why aren't South African brands haute? Money Web*. http://www.moneyweb.co.za/archive/why-arent-south-african-brands-haute/.

Falahati, L.; Paim, L.; Ismail, M.; Haron, S. & Masud, J. (2011). Assessment of university students' financial management skills and educational needs. *African Journal of Business Management*, Vol. 5, No. 15, pp. 6085-6091.

Ferguson, T. (2008). *Gen Y is setting the tech agenda*. http://www.bloomberg.com/bw/stories/2008-07-30/gen-y-is-setting-the-tech-agendabusinessweek-business-news-stock-market-and-financial-advice.

Garman, E. T. & Forgue, R. E. (2008). *Personal finance*. (9th ed.). USA: Cengage Learning.

Gitman, L. J. & Joehnk, M. D. (2008). *Personal financial planning*. New York: South-Western Thompson Learning.

Goetz, J.; Cude, B. J.; Nielsen, R. B.; Chatterjee, S. & Mimura, Y. (2011). College-based personal finance education: student interest in three delivery methods. *Journal of Financial Counselling and Planning*, Vol. 22, No. 1, pp. 27-42.

James, J.; Leavell, H. W. & Maniam, B. (2002). Financial planning, managers and college students. *Managerial Finance*, Vol. 28, No. 7, pp. 35-42.

Joo, S. & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, Vol. 25, No. 1, pp. 25-50.

Joo, S.; Grable, J. E. & Bagwell, D. C. (2003). Credit card attitudes and behaviours of college students. *College Student Journal*, 37(3), pp. 405-419.

Kane, S. (2012), *Generation Y*. http://legalcareers.about.com/od/practicetips/a/GenerationY.htm.

Kempson, E.; Collard, S. & Moore, N. (2006). *Measuring financial capability: an exploratory study for the financial services authority*. European Credit Research Institute-Ed.: *Consumer Financial Capability: Empowering European Consumers*. Brussels: European Credit Research Institute, pp. 39-76.

Koh, B. & Fong, W. M. (2011). *Personal financial planning*. (4th ed.). Singapore: Prentice Hall.

Lai, M. M. & Tan, W. K. (2009). An empirical analysis of personal financial planning in an emerging economy. *European Journal of Economics, Finance and Administrative Sciences*, (16), pp. 99-111.

Leskinen, J. & Raijas, A. (2006). Consumer financial capability - a life cycle approach. European Credit Research Institute-Ed.: *Consumer Financial Capability: Empowering European Consumers*. Brussels: European Credit Research Institute, pp. 8-23.

Louw, J. J. (2009). *Financial literacy competencies of third-year university students: a case study*. North-West University. Masters Dissertation.

Malhotra, N. K. (2010). *Marketing research: an applied orientation, 6th ed*. New Jersey: Prentice Hall.

Markert, J. (2004). Demographics of age: generational and cohort confusion. *Journal of Current Issues and Research in Advertising*, 26(2), pp. 11-25.

Norvilitis, J. M.; Merwin, M.M.; Osberg, T. M.; Roehling, P. V.; Young, P. & Kamas, M. M. (2006). Personality factors, money attitudes, financial literacy and credit card debt in college students. *Journal of Applied Social Psychology*, Vol. 36, No. 6, pp. 1395-1413.

Olivier, D. (2007). South Africa poised to become a loyalty marketing gem. *Journal of Consumer Marketing*, Vol. 24, No. 3, pp. 180-181.

Rutherford, L. G. & Fox, W. S. (2010). Financial wellness of young adults age 18-30. *Family and Consumer Sciences Research Journal,* 38(4), pp. 468-484.

Sabri, M. F. & Mac Donald, M. (2010). Savings behaviour and financial problems among college students: the role of financial literacy in Malaysia. *Cross-cultural Communication*, Vol. 6, No. 3, pp. 103-110.

Schiffman, L. G.; Kanuk, L. R. & Wisenblit, J. (2010). *Consumer behavior*. (10th ed.). New Jersey: Prentice Hall.

Shaw, S. & Fairhurst, D. (2008). Engaging a new generation of graduates. *Education + Training*, Vol. 50, No. 5, pp. 366-378.

Shim, S.; Xiao, J.J.; Barber, B.L. & Lyons, A.C. (2009). Pathways to life success: a conceptual model of financial well-being for young adults. *Journal of Applied Development Psychology*, Vol. 30, No.6, pp. 708-723.

Stats SA (Statistics South Africa). (2015), *Statistical release P0302: 2015 mid-year population estimates*. http://www.statssa.gov.za/publications/P0302/P03022015.pdf.

Swart, N. (2009). *Manage your money: basic financial life skills for South Africans*. (2nd ed.). Pretoria: Van Schaik.

Swart, N. (2012), Personal financial management: the Southern African guide to personal financial planning, 3rd ed.; Claremont: Juta.

Twenge, J. M. and Cambell, S. M. (2008). Generational differences in psychological traits and their impact on the workplace. *Journal of Managerial Psychology*, Vol. 23, No. 8, pp. 862-877.

Van Gijsen, N. (2002). *Retirement – all you want to know without the jargon*. Cape Town: Pearson.

Wilson, M. & Gerber, L. E. (2008). How generational theory can improve teaching: strategies for working with Millennials. *Currents in Teaching and Learning*, Vol. 1, No. 1, pp. 29-44.