

AFRICAN GENERATION Y STUDENTS' PERCEIVED PERSONAL FINANCIAL MANAGEMENT SKILLS

Marko van Deventer

North-West University (Vaal Triangle Campus), South Africa

E-mail: Marko.VanDeventer@nwu.ac.za

Natasha de Klerk

North-West University (Vaal Triangle Campus), South Africa

E-mail: Natasha.deKlerk@nwu.ac.za

—Abstract —

Effective personal financial management is of great importance, especially in a world where individuals are faced constantly with financial risks and uncertainties regarding their financial future. However, in order to plan effectively, control and manage financial risks and opportunities in the future, as well as enjoy personal financial satisfaction, it is essential that individuals be equipped with the necessary personal financial management skills. This article reports on a study undertaken to determine African Generation Y students' perceived personal financial management skills in the South African context. In South Africa, the Generation Y cohort, labelled as individuals born between 1986 and 2005, accounted for an estimated 32 percent of the country's total population in 2015, of which the African portion made up a projected 84 percent of this cohort. A quantitative research approach was used, whereby a structured, self-administered questionnaire was employed to collect data from a non-probability convenience sample of 500 African Generation Y students across two South African public higher education institutions' campuses located in the Gauteng province to determine their perceived personal financial management skills. The findings suggest that African Generation Y students perceive themselves as being skilled in personal financial management. Through better understanding students' perceived personal financial management skills, the results of this study may aid in creating awareness of certain shortfalls in African Generation Y individuals' personal financial management.

Key Words: *Generation Y students, personal financial management skills, South Africa*

JEL Classification: B16, D14, D81, G02, J13, M21.

1. INTRODUCTION

Personal financial management is important for everyone (Fünfgeld & Wang, 2009), particularly in a world where instability and threats, such as less buying power of money, increased interest rates and unemployment abound in the financial- and economic environment (Shim et al., 2009). Consequently, individuals are faced constantly with financial risks and uncertainties regarding their financial future and well-being (Swart, 2012). It is therefore important that individuals be equipped with the necessary personal financial management skills in order to effectively and efficiently manage everyday life activities (Falahati et al., 2011), thereby ensuring low levels of debt, responsible spending, active savings and financial security at retirement (Chinen & Endo, 2012).

Financial knowledge and understanding form the basis for financial skills, and personal attitudes towards financial planning such as spending and saving influences these skills (Leskinen & Raijas, 2006). As such, financial skills are described as the ability to apply financial knowledge and understanding to make appropriate financial decisions, evaluate information and compare various financial products or courses of action (Kempson et al., 2006). Therefore, in order to effectively plan, control and manage financial risks and opportunities in the future, financial skills are essential.

Generally, students begin and go through their university life with limited skills for managing personal finances (Chinen & Endo, 2012), taking little responsibility in this regard (Goetz et al., 2011). This may be attributed to the fact that students' parents are the typical primary caretakers (Sabri & MacDonald, 2010). While some students may graduate with acceptable credit scores, developed financial management skills and accumulated some degree of personal wealth, others are challenged with excessive debt, overdue accounts and the inability to effectively deal with their financial obligations. Without financial planning experience and skills, it may be difficult for students to manage personal finances in a consumer economy that entices spending, with the Internet enabling convenient online shopping and credit cards making borrowing easy (Shim et al., 2009). Consequently, students may be at risk to the marketing tactics of financial institutions, which may impair their future financial security (Borden et al., 2007).

Students are generally regarded as a high-risk group in terms of financial stability (Cude et al., 2006). This may be ascribed to ineffective financial behaviours and

attitudes, such as low savings in general (Sabri & MacDonald, 2010) and insufficient funds for retirement in particular (James et al., 2002), poor financial record keeping (Chen & Volpe, 1998) and high credit card debt (Norvilitis et al., 2006). This coupled with students' ignorance regarding their own financial status and future wealth (James et al., 2002) is likely to have negative consequences on their financial well-being. Additionally, students have to account for the psychological costs associated with financial problems, such as high financial stress levels (Joo & Grable, 2004).

In international markets a limited number of studies have been carried out concerning students' financial management skills. Chavez (2015) found that 57 percent of the 751 American students studied rated their financial management skills as good or excellent, whereas 31 percent rated their skills as fair and 12 percent as poor or terrible. A study conducted by Falahati et al. (2011) revealed that, of the 2519 students surveyed in Malaysia, 57 percent evaluated themselves as being somewhat skilled in financial management, approximately 31 percent rated themselves as being skilled and roughly six percent evaluated themselves as having no skill at all. An extensive review of the literature unveiled no similar or related studies undertaken in South Africa to determine black Generation Y (hereafter referred to as African Generation Y) students' perceived personal financial management skills.

In generational studies, it is important not to stereotype any generational cohort, which can easily occur given that older generations are influenced by the same permeating conditions shaping younger generations (Nicholas et al., 2011). Rather, the aim of generational research is to explain the extent to which the average individual in one generational cohort differs from the individual in another (Twenge & Cambell, 2008). While experts differ on the terminology used to define the various generations, as well as the exact start and end dates of any one generation (Reeves & Oh, 2007), Eastman and Liu (2012) define Generation Y as those individuals born between 1986 and 2005.

In 2015, the South African population amounted to approximately 54 956 900, of which a projected 20 797 341, or 38 percent, is represented by the Generation Y cohort. The African Generation Y made up 84 percent of South Africa's Generation Y cohort and 32 percent of the total South African population (Stats SA, 2015). As such, the African Generation Y cohort represents a segment of significant proportion.

The Generation Y cohort have a vigorous sense of independence and autonomy (Williams et al., 2010), are education-directed, confident, technologically innovative (Brier, 2004), passionate, strong-willed, optimistic, adaptable to change, demanding, have a high expectation level, and they generally voice their opinions (Cox et al., 2008). Moreover, these individuals are ambitious, self-reliant, individualistic, entrepreneurial, achievement-oriented, are socially and culturally aware (Kane, 2012), career-oriented (Wilson & Gerber, 2008) and are highly motivated (Olivier, 2007).

Born into the age of the Internet, mobile phones, convergent technologies and a number of multimedia platforms (Shaw & Fairhurst, 2008), this cohort is perceived as the plugged-in citizens of a global community (Kane, 2012) and the most Internet-savvy generation alive today (Ferguson, 2008). In terms of personal finance, this cohort is considered the next big generation with powerful aggregate spending (Cui et al., 2003) and is in a position to become the wealthiest generation to date. In 2015, these individuals' global spending was estimated at 2.5 trillion American Dollars (Bleedorn, 2013). Furthermore, as post degreeed professionals and entrepreneurs, these individuals have the capability to earn high income (Braccia, 2013). For this reason, their income is expected to reach 3.4 trillion American Dollars globally by 2018 (Bleedorn, 2013). In addition, this cohort's affluence and influence is growing considerably, and with that, their financial appetite, as more consumers of this cohort are in possession of a cheque and credit card (Cox et al., 2008).

As the first generation to experience a period of non-discrimination and segregation in South Africa, the African Generation Y cohort attended multicultural schools and freely socialised with diverse races (Bevan-Dye et al., 2012). Moreover, because wealth-creation, education and career possibilities are now more easily obtainable, African Generation Y have more opportunities available to them compared to previous generations from this ethnic group. Additionally, the growing African middle class, defined as Black Diamonds by the UCT Unilever Institute of Strategic Marketing and TNS Research Surveys, provides aspirational examples of what can be accomplished (De Waal, 2008).

The Generation Y cohort in general and African Generation Y members in particular, have a high future earning potential and consequently a higher social status (Bevan-Dye & Surujlal, 2011). Therefore, it is essential that this generation engage in the development of personal financial management skills to secure a

stable financial future. Cudmore et al. (2010) believe that the development of personal financial management skills is important given that Generation Y face the challenge of making financial decisions in an increasingly complex financial environment.

2. METHODOLOGY

This study adopted a quantitative approach to determine African Generation Y students' perceived personal financial management skills.

2.1 Sampling method

The target population, relevant for this study was full-time undergraduate African Generation Y students between the ages of 18 and 24 years, registered at the 26 South African public higher education institutions (HEIs) in 2013. From this sampling frame, a non-probability judgement sample of two HEI campuses located in the Gauteng province was selected, one a traditional university and the other a university of technology. A non-probability, convenience sample of 500 African Generation Y full-time undergraduate students was subsequently drawn to undertake this study. This sample size was considered sufficient as it is in the range of published studies of a similar nature, such as Sam et al. (2012) (sample size of 500) and Lai and Tan (2009) (sample size of 400).

2.2 Measurement instrument and data collection procedure

The required data was collected using a structured self-administered questionnaire. In order to elicit information on African Generation Y students' perceived personal financial management skills, a scale developed and validated by Falahati et al. (2011) was adapted and used. Responses to this 10-item scale, which included 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, were measured on a six-point Likert scale (1= strongly disagree, 6= strongly agree). In addition, the questionnaire included a section designated to gather the participants' demographical information as well as a cover letter explaining the purpose of the study.

In order to ascertain reliability, the questionnaire was piloted on a convenience sample of 40 students on a South African HEI campus that did not form part of the sampling frame of the main study. The scale returned a Cronbach alpha value

of 0.883, which exceeds the recommended Cronbach alpha level of 0.6 (Malhotra, 2010). An average inter-item correlation value of 0.445 was recorded, thereby suggesting convergent and discriminant validity, as this value fell within the recommended range of 0.15 to 0.50 (Clark & Watson, 1995). The questionnaire was subsequently administered to the identified sample. Lecturers at each of the two HEIs were contacted and asked whether they would allow questionnaire distribution to their students either during class or after class. After permission had been obtained, fieldworkers distributed the questionnaires to the students at the two campuses and were duly informed that participation was strictly on a voluntary basis. The Statistical Package for Social Sciences (IBM SPSS), Version 23 was used to analyse the captured data. The statistical methods applied on the empirical data set included a one-sample t-test and a two independent-samples t-test.

3. RESULTS

Of the 500 questionnaires distributed, 385 usable questionnaires were returned. This translates into a response rate of 77 percent. The majority of the participants in the sample indicated being 21 years of age, followed by those who indicated being 20 years of age and 19 years of age. The sample included a greater number of female than male participants. With regards to 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. The majority of participants indicated Gauteng as their province of origin, followed by Limpopo. The demographic information of the sample's participants is summarised in Table 1.

Table 1: Sample description

Age (%)	Gender (%)	Year of study (%)	Province of origin (%)	Institution (%)
18 (10)	Male (37)	First year (42)	Eastern Cape (2)	HEI A (54)
19 (21)	Female (63)	Second year (24)	Free State (11)	HEI B (46)
20 (24)		Third year (34)	Gauteng (60)	
21 (31)			KwaZulu-Natal (3)	
22 (14)			Limpopo (11)	
			Mpumalanga (7)	
			Northern Cape (1)	
			North-West (5)	

In the main survey, an acceptable Cronbach alpha value of 0.818 was calculated for the overall Personal Financial Management Skills Scale. In order to assess the

validity of the scale, the average inter-item correlation coefficient was computed. An inter-item correlation coefficient value of 0.319 was calculated, which is within the recommended range of 0.15 to 0.50, thereby inferring both convergent and discriminant validity of the scale.

Means above 4 were calculated for all the items in the Perceived Personal Financial Management Skills Scale. To determine whether these calculated means were statistically significant, a one-sample t-test was conducted. The level of significance was set at the traditional 0.05 ($\alpha=0.05$) and the expected mean was set at mean > 3.5 . Table 2 outlines the calculated means, standard deviations, standard errors, t-values and p-values.

Table 2: One-sample t-test

Personal financial management skills	Mean	Standard deviation	Standard error	t-value	p-value
Skilled at managing daily expenses	4.600	1.223	0.062	25.449	0.000*
Skilled at managing credit/debt	4.429	1.336	0.068	20.973	0.000*
Skilled at managing finances to provide for future needs	4.436	1.231	0.062	22.874	0.000*
Time management skills	4.296	1.334	0.068	19.049	0.000*
Stress management skills	4.112	1.346	0.068	16.204	0.000*
Skilled at managing savings	4.530	1.082	0.055	27.735	0.000*
Negotiating skills	4.738	1.061	0.054	32.132	0.000*
Decision making skills	4.873	0.974	0.049	37.708	0.000*
Problem solving skills	4.842	0.928	0.047	38.909	0.000*
Skilled at career planning	4.794	1.034	0.052	33.941	0.000*

* Statistically significant at $p < 0.05$

As indicated in Table 2, a significant p-value ($p=0.000 < 0.05$) were computed for each of the personal financial management skills. This suggests that African Generation Y students perceive themselves as being skilled in personal financial management.

A two independent-samples t-test was used to determine whether there is a significant divergence between male and female Generation Y students' perceptions concerning the ten personal financial management skills. Table 3 presents the statistical significance of male and female Generation Y students, in

terms of the ten perceived personal financial management skills, tested for this study.

Table 3: Two independent-samples t-test

Personal financial management skills	Male Mean N=144	Male Std. Dev.	Female Mean N=241	Female Std. Dev.	t-value	p-value
Skilled at managing daily expenses	4.583	1.325	4.610	1.179	-0.205	0.095
Skilled at managing credit/debt	4.438	1.305	4.423	1.358	0.101	0.989
Skilled at managing finances to provide for future needs	4.479	1.257	4.411	1.129	0.527	0.516
Time management skills	4.236	1.394	4.332	1.300	-0.681	0.414
Stress management skills	4.326	1.278	3.983	1.372	2.434	0.807
Skilled at managing savings	4.590	1.137	4.494	1.049	0.846	0.228
Negotiating skills	4.882	0.950	4.651	1.116	2.071	0.007*
Decision making skills	5.056	0.952	4.763	0.974	2.872	0.201
Problem solving skills	4.903	0.970	4.805	0.903	1.000	0.752
Skilled at career planning	4.833	1.103	4.770	0.992	0.581	0.209

* Statistically significant at $p < 0.05$

As is evident from Table 3, for nine of the personal financial management skills, there was no statistical significant difference between male and female Generation Y students' perceptions. This infers that male and female Generation Y students did not differ much in their perceptions towards these nine personal financial management skills. However, a statistically significant difference was found between male and female Generation Y students' perceived negotiating skills. This suggests that male students perceive themselves as being more skilled in negotiation than their female counterparts do.

4. DISCUSSION

Indeed, students' financial behaviour will have a significant effect on their future life and security. As such, this study investigated African Generation Y students' perceived personal financial management skills in terms of 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, by employing the Personal Financial Management Skills Scale of Falahati et al. (2011). The results of this study provide valuable insights into African Generation Y students' perceived personal financial management

skills. This study concluded that African Generation Y students perceive themselves as being equipped with the necessary personal financial management skills. More specifically, students' perceptions towards decision-making skills were rated the highest, followed by problem solving skills and being skilled in career planning. In comparison with the other financial management skills, the students perceived themselves to be less skilled in time management and the management of credit/debt, and rated perceptions towards stress management skills the lowest. This is a concern, owing that ineffective personal financial management and planning will give rise to stress, which ultimately should be managed to ensure successful personal financial management. Even though the participants perceive themselves as having the financial skills to manage their personal finances, one study (Van Deventer, 2013) found that a lack of financial literacy questions whether the participants are really capacitated with the necessary financial skills to manage and plan personal finances successfully. Chavez (2015) agrees, stating that students' spending and saving behaviour indicate that their financial management skills may not be as astute as they perceive it to be. This may of cause in itself pose a danger given that, this perception of assumed financial skills can have a detrimental influence on how they manage their personal finances. Therefore, financial educational programmes with a practical approach can assist with assessing and improving personal financial management skills and promote personal financial responsibility. These programmes may require a combination of information, skill building and motivation to make the desired changes in financial behaviour.

The results of study suggest perception differences pertaining to negotiating skills between male and female students. As such, financial educational programmes should consider differences in providing information and education to male and female students, particularly concerning the development of negotiating skills.

This study, as with most studies, has certain limitations, thereby presenting a number of opportunities for future research. A non-probability convenience sampling approach was used to survey the study's participants. As such, it is important to take great care in interpreting the results. In addition, this study used a single cross-sectional design and therefore lacks the accurateness of a longitudinal study. Given the limited number of studies undertaken to determine the African Generation Y cohorts' perceived personal financial management skills in South Africa, future research in this area is recommended.

5. CONCLUSION

Owing to the continual increase in the spending power amongst Black Diamonds, it has become imperative to determine African Generation Y students' perceived personal financial management skills before they enter the workplace and possibly become the next Black Diamonds. The purpose of this study was to determine African Generation Y students' perceived personal financial management skills. The findings of this study indicate that African Generation Y students perceive themselves as having the necessary personal financial management skills. By being aware of African students' perceived personal financial management skills, financial institutions, educators, industry professionals and other role players are equipped with valuable information on how to approach consumers of this generational cohort and it may create awareness of certain shortfalls in African Generation Y students' personal financial management.

BIBLIOGRAPHY

Bevan-Dye, A.L., Garnett, A. and 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.

Bevan-Dye, A.L. and Surujlal, J. (2011), "Attitude towards materialism in sport and materialism tendencies amongst black Generation Y students", *African Journal for Physical, Health Education, Recreation and Dance*, Vol. 17, No. 4, pp.43-55.

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

Borden, L.M., Lee, S., Serido, J. and 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.

Braccia, C. (2013), *The Y factor: how to market to Generation Y*, <http://www.dh.com/expertise/perspectives/the-y-factor-how-to-market-to-generation-y>, [Accessed 06.06.2015].

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, pp.15.
- Chen, H. and 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. and 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.
- Clark, L.A. and Watson, D. (1995), "Constructing validity: basic issues in objective scale development", *Psychological Assessment*, Vol. 7, No. 3, pp.309-319.
- Cox, D., Kilgore, T.L., Purdy, T. and 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, [Accessed 14.02.2013].
- Cude, B.J., Lawrence, F.C., Lyons, A.C., Metzger, K., LeJeune, E., Marks, L. and 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.
- Cudmore, B.A., Patton, J., Ng, K. and McClure, C. (2010), "The millennials and money management", *Journal of Management and Marketing Research*, Vol. 4, No. 1, pp.1-28.
- Cui, Y., Trent, E.S., Sullivan, P.M. and 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.
- 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/>, [Accessed 13.05.2013].
- Eastman, J.K. and Liu, J. (2012), "The impact of generational cohorts on status consumption: an exploratory look at generational cohort and demographics on status consumption", *Journal of Consumer Marketing*, Vol. 29, No. 2, pp.93-102.

Falahati, L., Paim, L., Ismail, M., Haron, S. and 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-agenda>*businessweek-business-news-stock-market-and-financial-advice*, [Accessed 15.02.2014].

Fünfgeld, B. and Wang, M. (2009), "Attitudes and behaviour in everyday finance: evidence from Switzerland", *International Journal of Bank Marketing*, Vol. 27, No. 2, pp.108-128.

Goetz, J., Cude, B.J., Nielsen, R.B., Chatterjee, S. and 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. and Maniam, B. (2002), "Financial planning, managers and college students", *Managerial Finance*, Vol. 28, No. 7, pp.35-42.

Joo, S. and 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.

Kane, S. (2012), *Generation Y*, <http://legalcareers.about.com/od/practicetips/a/GenerationY.htm>, [Accessed 23.08.2014].

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

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

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

Nicholas, D., Rowlands, I., Clark, D. and Williams, P. (2011), "Google generation II: web behaviour experiments with the BBC", *Aslib Proceedings: New Information Perspectives*, Vol. 63, No. 1, pp.28-45.

Norvilitis, J.M., Merwin, M.M., Osberg, T.M., Roehling, P.V., Young, P. and 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.

Reeves, T.C. and Oh, E. (2007), "Generational differences", (in: Sector, J.M., Merrill, M.D., J. J. G. van Merriënboer, J.J.G. and Driscoll, M-Eds., *Handbook of research on educational communications and technology*), New Jersey: Lawrence Erlbaum Associates, pp. 295-303.

Sabri, M.F. and MacDonald, 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.

Shaw, S. and 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. and 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>, [Accessed 11.08.2015].

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 Deventer, M. (2013), Black Generation Y students' knowledge of and attitudes towards personal financial management, Master dissertation, Vanderbijlpark: North-West University.

Williams, K.C., Page, R.A., Petrosky, A. R. and Hernandez, E.H. (2010). "Multi-generational marketing: descriptions, characteristics, lifestyles and attitudes, *Journal of Applied Business and economics*, Vol. 11, No. 2, pp.1-17.

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