

SOCIAL COMPARISON, IMPULSIVE BUYING AND STUDENT DEBT AMONG GENERATION Y UNIVERSITY STUDENTS

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—Abstract —

Generation Y is an important market segment because they make-up such a large part of the South African population. University students are of particular interest because of their higher future earning potential. This student segment is also highly coveted by credit providers looking to establish early brand loyalty. This has led to many students becoming over indebted, and up to 50 percent of credit-active 18 to 26 year-old consumers are battling to pay their debts. This makes it important to understand how students' attitudes and values influence their current and future credit use. As such, this study aimed to determine the influence of social comparison and impulsive buying on South African generation Y students' attitude towards credit and credit intentions. Data were collected using a self-reporting questionnaire from a convenience sample of 630 generation Y students registered at four higher education campuses. Data analysis comprised exploratory and confirmatory factor analysis, reliability and construct validity analysis, and path analysis. Confirmatory factor analysis affirmed a four-factor model, which exhibited internal consistency and composite reliability, construct validity and acceptable model fit. The results of the subsequent path analysis infer that generation Y students' social comparison and impulsive buying are significant predictors of their attitude towards credit and future credit intentions. The findings suggest that social comparison and impulsive buying contribute to generation Y students' positive attitude towards credit and foster their

future credit usage intentions. This has implications both for marketers who use social media platforms to display products and retailers who rely on impulsive buying to boost sales. Care should, however, be exercised in approving students for credit accounts they cannot afford to repay

Keywords: Credit attitudes, credit intentions, generation Y, social comparison, impulsive buying

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1. INTRODUCTION

For some time, marketers have been cognisant that income and possessions affect both how people see themselves and how others see them (Furnham, 1984). To determine their place in society, people compare their own possessions to that of their peers, which is known as social comparison (Norvilitis & Mao, 2013; Ordabayeva & Chandon 2010). This social comparison of possessions and outward appearances (Tiggemann *et al.*, 2018; Yoon *et al.*, 2016) is strongly related to and complicated by status consumption, in which people use products as status symbols to communicate social and economic standing to others (Cronje *et al.*, 2016). Individuals seeking social approval follow the latest trends in fashion and lifestyle, often living above their means to project an image of success (Chipp *et al.*, 2011; Nga *et al.*, 2011). Generation Y (individuals born between 1986 and 2005) (Markert, 2004) have been socialised in a materialistic society and consequently link self-esteem and public self-consciousness to displays of wealth. This drives the status consumption and credit use among generation Y (Butcher *et al.*, 2017; Kim & Jang, 2013).

2. LITERATURE REVIEW

Social media plays an increasingly important role in social comparison as it gives people an instantaneous and almost unlimited window into the lives of their peers. The numbers of 'likes' people receive on social media posts often serve as a mechanism for comparisons. Typically, people only share those parts of their lives that will carry approval and

images are often edited and enhanced, presenting a distorted picture for comparison (Tiggemann *et al.*, 2018; Chae, 2017).

Generation Y consumers often engage in social comparison to determine whether they are keeping up with their peers. Since people present an idealised self and not their actual self, social media comparisons are most often upward or negative and cause feelings of inadequacy and envy. This may then trigger a competitive drive for status-driven expenditures (Ozimek *et al.*, 2018; Kim & Jang, 2017). Even when a person is objectively well off, such upward social comparisons may cause dissatisfaction and lead consumers to fall into an aspirations trap, where larger and more frequent purchases become necessary to satisfy the individual's competitive appetite through acquisitions (Nagpaul & Pang, 2017a). Social comparisons may also lead people who have a low self-esteem to fear negative evaluation, which may result in overspending (Nagpaul & Pang, 2017b). People who tend to compare themselves with others with greater economic resources may desire or feel entitled to more and, consequently, outspend their income (Lea *et al.*, 1995). Eastman and Liu (2012) found that potential buyers who make comparisons with others to gauge the success of the product in increasing their status level, occur more frequently among members of generation Y. Social comparison further influences consumer behaviour by normalising debt among children who grow up in households with higher levels of consumer debt (Pattarin & Cosma, 2012). This may partially explain why people who are more inclined to social comparison tend to have higher levels of debt and lower levels of financial well-being (Norvilitis & Mao, 2013).

Impulsive buying is an instant, unplanned purchase of something a consumer had no intention of purchasing. Impulsive buyers are more receptive to external buying stimuli – sudden and unexpected buying ideas that promise immediate gratification (Prajapati & Rathod, 2013). The three important traits that correlate with impulse buying are impulsiveness, optimum stimulation level and self-monitoring. Outside stimulation increases stimulation levels and increases impulsive behaviour, while self-monitoring will lower impulsive behaviour (Chen & Wang, 2015). People low self-esteem or who feel anxious, guilty and unhappy, are more likely to succumb to impulse buying in response to stimuli such as advertisements (Kim, 2014; Xu, 2008). Credit makes impulsive buying easier since consumers can buy items

even if they do not have sufficient cash available and pay at a later date (Palan *et al.*, 2011; Wang & Xiao, 2009).

Credit has become socially acceptable, as seen in the ‘charge now, pay later’ attitude among generation Y (Braunsberger *et al.*, 2005). Early research found that attitude towards credit is a more important predictor of debt than socio-demographic factors or disposable income (Livingstone & Lunt, 1992). Credit also plays an important role in the South African economy, fuelling economic growth as well as the growth of the middle class (Nzukuma, 2017). Even after the 2008 economic downturn, unsecured lending continued to grow by 5 percent year on year, even while real gross domestic product (GDP) growth was often closer to 1 percent (Absa, 2018; Lamprecht, 2018). This is partly due to South Africans’ consumer credit spending (Thomas, 2015). Close to 25 million South Africans are credit active. This is eight million more than the total number of employed people in South Africa and, unsurprisingly, 70 percent of middle-class consumers claim that they are experiencing financial problems related to debt (Ferreira, 2017; Enca, 2017).

According to well-established models, including the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975) and the theory of planned behaviour (TPB) (Ajzen, 1991), the most proximal cause of behaviour is behavioural intention. Both the TRA and TPB propose that behavioural intentions can, in turn, be predicted by attitude towards a given behaviour (Ajzen, 1991; Fishbein & Ajzen, 1975). Behaviour intentions towards credit include the intention to incur debt through a range of products such as personal loans, credit cards, vehicle financing or mortgages (Chan *et al.*, 2012).

3. METHODOLOGY

The study followed a descriptive research design, where the single cross-sectional sampling strategy was used.

3.1 Sampling method and data collection

The study’s target population was generation Y university students (aged between 18 and 26 years), who were registered at four public South African higher education institution (HEIs) campuses. These campuses included one from a university of technology, two from a traditional university and one from a comprehensive university.

Fieldworkers distributed 700 questionnaires across these four campuses using the mall-intercept survey approach to a convenience sample of students who volunteered to participate in the study.

3.2 Research instrument

This study used a self-reporting questionnaire that included a section requesting demographic data and a section with validated scales used to determine attitudes and intention. The financial social-comparison scale used in this study was created by Norvilitis and Mao (2013), and impulsive buying was measured with a scale developed by Rook and Fisher (1995). Attitude towards credit was measured using items from the scale developed by Davies and Lea (1995), and credit usage intentions from the scale published by Chan *et al.* (2012). A six-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (6), was used to record responses to these scaled items.

The questionnaire for data collection was submitted to the Ethics Committee of the Faculty of Economic Sciences and Information Technology, North-West University (Vaal Triangle Campus) and clearance was granted with the ethics clearance number - ECONIT-2016-113.

3.3 Data analysis

The gathered data were analysed using the IBM Statistical Package for Social Sciences (SPSS) and Analysis of Moment Structures (AMOS), Version 26 for Windows. The statistical analysis techniques employed included exploratory factor analysis (EFA), collinearity diagnostics, confirmatory factor analysis (CFA), reliability and construct validity analysis, and structural path analysis. The level of statistical significance was set at $p \leq 0.01$ for all tests.

4. RESULTS

From the 700 questionnaires distributed among students, 630 completed questionnaires were returned, which is a 90 percent response rate. A description of the sample is outlined in Table 1.

Table 1: Sample description

Age	Percent (%)	Gender	Percent (%)	HEIs	Percent (%)	Province of origin	Percent (%)
18	4.6	Male	43.0	A	16.2	Gauteng	41.0
19	11.8	Female	57.0	B	26.4	Limpopo	10.5
20	21.6			C	36.6	North West	30.0
21	24.1			UoT	19.8	Free State	4.9
22	18.1					Easter Cape	3.7
23	10.2					Mpumalanga	5.1
24	5.0					KwaZulu-Natal	3.2
25	2.7					Northern Cape	1.4
26	1.9					Western Cape	0.2

As outlined in Table 1, the majority of the participants (63.8%) were 20, 21 and 22 years old, although the other age groups specified were also represented. Similarly, most participants were either from Gauteng (41%) or the North West (30%), but all other provinces were also represented. The sample included 57 percent female and 43 percent male participants, which corresponds to the higher female enrolment in tertiary education (Council on Higher Education, 2016). From the sample, 42.6 percent were registered at the traditional university (A & B), 36.6 percent at the comprehensive university (C), and 19.8 percent at the university of technology (UoT).

As the study used several scales, albeit from published studies, exploratory factor analysis using principal axis factor extraction and Promax rotation was conducted in order to ensure that no items cross-loaded and that no items had communalities below 0.4. This analysis returned a Kaiser-Meyer-Olkin (KMO) value of 0.898 and a significant Bartlett's test of sphericity (7951.994; $df=435$; $p=0.000 < 0.01$), thereby indicating sampling adequacy (Pallant, 2010) and resulted in four factors, as per the literature, being extracted that explained 44.686 percent of the total variance. However, several items cross-loaded or had communalities below 0.4, which, according to Hair, Black, Babin and Anderson (2010), means that those items have little in common with the other items in their respective factor and, consequently, are candidates for elimination. Candidates for deletion included two items from the impulse buying scale, four items from the social comparison scale, three items from the credit attitude scale and one item from the

credit intension scale. These items were eliminated from further analysis once they had been examined to ensure that their deletion would not alter the original construct's conceptualisation in any way. Following the deletion of these items, the EFA was re-run and again returned an acceptable KMO value of 0.880 and a significant Bartlett's test of sphericity (chi square = 5566.090, 190 dfs, $p \leq 0.01$). Table 2 reports on the pattern matrix loadings, communalities, eigenvalues and percentage variance extracted.

Table 2: Exploratory factor analysis

Items	1	2	3	4	Communalities
2		.726			.542
3		.789			.623
4		.729			.514
5		.669			.415
6		.592			.411
7		.638			.414
10			.831		.633
11			.698		.541
12			.918		.790
13			.535		.443
20				.665	.493
21				.707	.466
22				.721	.559
23				.706	.497
24	.655				.521
25	.679				.516
26	.530				.435
28	.822				.626
29	.818				.562
30	.757				.583
Eigenvalues	5.704	2.448	1.385	1.047	
Percentage variance	28.518	12.238	6.927	5.233	

As reported in Table 2, the second EFA again resulted in four factors being extracted, this time explaining 52.92 percent of the variance. With a sample size exceeding 600, the factor loadings, which were all above 0.50, were statistically significant at $p \leq 0.01$ (Stevens, 2002), as well as practically significant (Hair *et al.*, 2010). Moreover, all communalities exceeded 0.40, thereby indicating that each item fits well with its respective factor (Pallant, 2010).

Collinearity diagnostics and an assessment of the nomological validity of the proposed model were then undertaken. In Table 3, the computed Pearson's product-moment correlation coefficients between the pairs of latent factors and the results of the tolerance values and variance inflation factor (VIF) values are reported.

Table 3: Collinearity diagnostics and correlation matrix

	1	2	3	Tolerance values	VIF
Impulsive buying				.782	1.279
Social comparison	.430*			.773	1.293
Attitude towards credit	.257*	.226*		.755	1.325
Credit intentions	.271*	.311*	.476*	.724	1.382

* $p \leq 0.01$

As shown in Table 3, the nomological validity of the proposed model is evident given the statistically significant association in the correct direction between each of the pairs of latent factors (Hair *et al.*, 2010). Moreover, with an average VIF of 1.320 and tolerance values ranging from 0.724 to 0.782, no noteworthy multicollinearity issues were evident (Field, 2009).

Attention was then turned to running a CFA on the measurement model, which was specified as comprising the four latent factors, i.e. impulsive buying (six indicators), social comparison (four indicators), attitude towards credit (four indicators) and credit intentions (six indicators). For model identification purposes, the first loading on each of the four latent factors was fixed at 1.0 (Byrne, 2010), which resulted in 230 distinct sample moments and 66 distinct parameters to be estimated, which resulted in 164 degrees of freedom (df) based on an over-identified model and a chi-square value of 632.377, with a probability level equal to 0.000. Table 4 reports on the estimates for the measurement model, including standardised loading estimates, R^2 , Cronbach alphas (α), composite reliability (CR), average variance extracted (AVE), and the square root of the AVE (\sqrt{AVE}) values.

Table 4: Measurement model estimates

Latent factors	Standardised loading	R ²	<i>a</i>	CR	AVE	√AVE
Impulsive buying (F1)	.740	.547	.841	.84	.48	.69
	.784	.615				
	.714	.510				
	.640	.410				
	.600	.360				
Social comparison (F2)	.642	.412	.843	.85	.59	.77
	.796	.634				
	.729	.531				
	.878	.771				
Attitude towards credit (F3)	.645	.416	.797	.80	.50	.71
	.711	.506				
	.672	.451				
Credit intensions (F4)	.751	.564	.869	.87	.53	.73
	.685	.469				
	.717	.515				
	.723	.522				
	.654	.428				
	.771	.595				
	.723	.522				
	.761	.579				
Correlations	F1↔F2:.479	F2↔F3:.255	F2↔F4:.340			
	F1↔F3:.296	F1↔F4:.297	F3↔F4:.567			

The results presented in Table 4 indicate that the latent factors in the measurement model exhibit both internal consistency and composite reliability, given that all CR and *a* values exceed 0.70 (Malhotra, 2010). Standardised loading estimates above 0.50 together with the CR values also suggest convergent validity for all four latent factors. However, in terms of the AVE values, at 0.48, the impulsive buying latent factor falls slightly short of the requisite 0.50 level for convergent validity (Hair *et al.*, 2010). That being said, given the fact that this AVE value is approaching the 0.50 level, coupled with the CR and *a* values computed for this latent factor and the standardised loading estimates, the decision was taken to tentatively assume convergent validity for

impulsive buying. Possibly a more salient measure of construct validity is that of discriminant validity, which may be assumed when the \sqrt{AVE} values exceed their relevant correlation coefficients (Hair *et al.*, 2010; Malhotra, 2010). As shown in Table 4, there is clear evidence of discriminant validity. The model fit indices computed in this study comprised the incremental fit index (IFI), comparative fit index (CFI), the Tucker-Lewis index (TLI) and the root mean square error of approximation (RMSEA), where IFI, CFI and TLI values equal to or above 0.90, together with an RMSEA value below 0.08, are indicative of acceptable model fit (Van de Schoot, Lugtig & Hox, 2012). In terms of the measurement model, there was acceptable model fit, with an IFI of 0.914, a TLI of 0.90, a CFI of 0.914 and an RMSEA of 0.067.

Following this CFA, a structural model was specified whereby it was theorised that impulsive buying and social comparison are a positive influence on attitude towards credit, which, in turn, was theorised to have a positive influence on credit usage intentions. As with the measurement model, this structural model exhibited acceptable model fit with an IFI of 0.913, a TLI of 0.90, a CFI of 0.913 and an RMSEA of 0.068. The estimates produced by AMOS for this structural model are reported in Table 5.

Table 5: Structural model estimates

Paths	Un-standardised			
	β	β	SE	<i>p</i>
Impulsive buying → Attitude towards credit	.22	.23	.054	0.00
Social comparison → Attitude towards credit	.16	.18	.049	0.00
Attitude towards credit → Credit intentions	.66	.58	.061	0.00

β : beta coefficient; SE: standardised error; *p*: two-tailed statistical significance

The structural model estimates provided in Table 5 show that all regression paths tested were positive and statistically significant ($p \leq 0.01$). Impulsive buying ($\beta = 0.23$, $p < 0.01$) and social comparison ($\beta = 0.18$, $p < 0.01$) tendencies are significant positive predictors of generation Y students' attitude towards credit. Generation Y students' attitude towards credit ($\beta = 0.58$, $p < 0.01$), in turn, is a significant positive predictor of their credit usage intentions. According to the computed squared multiple correlation coefficient (SMC), in combination impulsive buying, social comparison and attitude towards

credit explain 34 percent of the variance in generation Y students' credit usage intentions.

5. CONCLUSION

The aim of this study was to confirm a four-factor model for South African generation Y students' credit usage intentions and to ascertain the influence of impulsive buying and social comparison on their attitude towards credit and, consequently, their credit intentions. The findings confirm a four-factor model that exhibits good model fit, composite and internal-consistency reliability, as well as nomological, convergent and discriminant validity. The findings suggest that social comparison and impulsive buying contribute to generation Y students' positive attitude towards credit and foster their future credit usage intentions. Credit growth continues unabated due, in part, to the positive attitude people have towards debt and, in part, to the social pressure to keep up with peers in spending and possessions. Credit use is also normalised among children who grow up in households with very high debt and accompanying financial problems. Upon becoming students, these children are then targeted by financial institutions for student loans, which leads to many students accruing debt and becoming over-indebted even before completing their studies and finding employment. As much as credit is an essential part of the modern global economy, it is essential that the youth develop sustainable credit usage habits. This can be achieved through financial literacy, responsible lending by credit providers and, most importantly, by changing the financial attitudes of generation Y.

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