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BRAND-CENTRED FASHION CLOTHING BEHAVIOUR MODELLING WITHIN GENERATION Y. A TWO-COUNTRY COMPARISON

***Abstract.** The study focuses on investigating the fashion clothing buying behaviour and potential brand loyalty within Generation Y by using buying antecedents, demographic, and behavioural variables. Samples of 400 people (Romanians/South Africans) were considered in a step-by-step methodology, using principal component analysis and logistic regressions. A rational buying behaviour for both nationalities was displayed, influenced by magazines and scholarship/bursary (Romanian sample), and celebrities, TV advertisements, buying frequency and budget for clothes (South African sample). Brand loyalty was established only for the South African sample. This study enriches the literature by exhibiting an intra-Generation Y image and extending this cohort's heterogeneity view through the uncovered brand loyalty differences. Managers can position fashion clothing brands for Generation Y based on rational buying motives, using magazines or endorsers in TV advertisements. The model can be improved by including the number of brands purchased from one clothing category, employing more metric scales, and other predictors.*

***Keywords:** consumer behaviour, fashion clothing, Generation Y, Romania, South Africa, principal component analysis (PCA), logistic regression*

JEL Classification: D12, M31, C51, C53

1. Introduction

Nowadays, Generation Y comprises students and fresh and already experienced employees and entrepreneurs. This mixture makes Generation Y individuals very interesting to decision makers considering their present and future buying behaviour and purchasing power. In this regard, it is expected that by 2025 this cohort's annual revenue will surpass \$8 billion in the USA alone (Ellyatt, 2015).

Generation Y prompts distinct behavioural traits when purchasing products and services, placing apparel quite often on top of their priorities (Kinley, Josiam & Lockett, 2010). The existing literature on clothing buying behaviour displayed by Generation Y is split based on motivation, as probably the most important buying antecedent, between rational or utilitarian and emotional or hedonic approaches. Thus, on the one hand, Generation Y is considered to be rational and price-oriented, enjoying variety, and willing to try new clothing items (Sullivan, Kang, & Heitmeyer, 2012; Bakewell & Mitchell, 2003). On the other hand, Generation Y enjoys conspicuous consumption, being interested in the impressions of others (O'Cass, Lee, & Siahtiri, 2013). In addition to motivation, in assessing Generation Y's fashion clothing buying behaviour, several authors have investigated information sources used by buyers, as purchase-related information is considered another important buying antecedent (Kinley et al., 2010; Kim & Lennon, 2000). The rational versus emotional buying behaviour parallel, plus seeking appropriate information are closely connected with buying involvement, which can affect or explain brand loyalty or automaticity (O'Cass, 2004) or buying inertia (Odin, Odin, & Valette-Florence, 2001), brand loyalty being assessed based on behavioural and, also, on attitudinal approaches (Odin et al., 2001). The extant literature is divergent when it comes to brand loyalty; Debard (2004) argued that Generation Y is brand loyal (Debard, 2004), while Lodes & Buff (2009) pointing out that Generation Y is not brand loyal. Narrowing down to fashion clothing, the literature concluded that brand loyalty was rendered especially if the underlying buying motivation was of emotional nature (O'Cass et al., 2013).

This diversity of findings prompted by the existing body of literature pertaining to Generation Y consumer behaviour, in general, and fashion clothing, in particular, could be explained by the heterogeneity marking this cohort, with several age structures being delineated based on buying behaviour (Kinley et al., 2010).

Most studies on Generation Y fashion clothing cover either the entire cohort (Pentecost & Andrews, 2010) or specific segments, often limited to students (Kinley et al., 2010; O'Cass et al., 2013), treating either purchasing motivation or information sources or brand loyalty or disloyalty. Thus, the literature lacks a holistic approach to these behavioural constituents and, especially, in the case of a specific age layer of Generation Y.

Considering this literature gap, and drawing from the work of Odin et al. (2001), the present study aims to enrich the extant literature by uncovering the importance of underlying constituents of fashion clothing behaviour, namely motivation and information sources, and whether there is brand loyalty or buying

inertia (a lack of interest in brands) in the case of one layer of Generation Y (i.e., individuals between 25 and 29 years old). This age group presents interesting peculiarities, as it includes students in their final years of education, as well as junior employees and young entrepreneurs, who like to be independent and, due to this, prioritising their needs differently in comparison with older groups (Duncan, 2016). To add more significance to the study, two nationalities, Romanian and South African, have been considered based on similarities in budget allocation for clothes for people between 20 and 29 years old (Edu, Lotter, Negricea & Avram, 2014), as well as gender and income sources as demographic variables and two behavioural variables, namely clothing buying frequency and yearly expenditure on clothes.

2. Literature review and hypotheses

2.1. Fashion clothing buying behaviour- an analysis centred on Generation Y

Individuals decide to buy fashion apparel by considering functional and/or emotional motives, the extant literature displaying strong evidence about motivation underlying apparel buying in the case of Generation Y. Functional buying motives take various forms, such as value for money, swift purchasing, buying products on sale or at low prices (Bakewell & Mitchell, 2003; Valaei & Nikhashemi, 2017), or design, fit, use and usefulness (Sullivan et al., 2012; Watchraveringan et al., 2010). Emotional fashion clothing buying motives, on the other hand, are exemplified in the case of Generation Y through aesthetics, escapism, shopping for fun or brand names, fashionability, innovativeness, or visual appeal (Bakewell & Mitchell, 2003; Watchraveringan et al., 2010; Sullivan et al., 2012). In delineating fashion clothing buying motivation, this study builds on the work of Bakewell and Mitchell (2003), thus 7 functional/utilitarian (seasonal wardrobe renewal, wearing occasion, matching with another item, fabric, design, manufacturing (cutting, printing, labelling, price, etc.) and 6 emotional/hedonic motivational variables (desire of acquiring a new item, desire to be trendy, self-image, socialising, leisure, and brand reputation) are being formulated from the five Generation Y clusters uncovered in their study to be tested in hypothesis H1 (see Table 1).

Motivation to purchase fashion clothing is built on knowledge. Consumers inform themselves about apparel features (fabric, size, colour), country of origin, functionalities (how to wear), user experience, purchasing considerations (payment, delivery, retail value) or emotional aspects (expected comments or compliments from other people) or brand name reputation (Kim and Lennon, 2000), using a significant number of sources. A comprehensive perspective about the types of information sources used by Generation Y when buying apparel is provided by Kinley et al. (2010). By using 18 variables covering personal and non-personal sources, they discovered that female friends and co-workers were appraised as important information sources by buyers together with 11 non-personal sources, comprising in-store sources, mass-media (TV and printed), other people and online sources. The current study draws from the work of Kinley et al. (2010), as the 18

variables used in their study were reconfigured into nine to be tested in hypotheses H2, comparing between personal and non-personal sources, and H3, assessing the usage of online sources versus offline sources (see Table 1) in the buying decision. These nine information sources, presented as displayed on the questionnaire, are: store web sites, online social network store pages, relatives/friends, magazines, store flyers and catalogues, TV ads, TV fashion shows, celebrities, and in-store comparisons.

2.2. Demographic and consumer behaviour variables used to explain fashion clothing buying behaviour

Demographic and consumer behaviour variables have been used in previous studies on fashion clothing buying behaviour or/and brand loyalty, some of them focusing on Generation Y, but especially related to the sample description (Pentecost & Andrews, 2010). Gender has been considered in previous fashion studies to explain differences in attitude, to document clothing preferences or purchase intention (Khare & Rakesh, 2010; Valaei & Nikhashemi, 2017). The present study aims to assess whether differences occur between men and women regarding buying one fashion clothing brand. Thus, hypothesis H4 was formulated (see Table 1). Income has been employed in apparel research to document rational and emotional buying decisions, purchasing involvement, and brand commitment, or to assess the impact of brand, style, price, or social identity on fashion clothing attitude formation or purchase intention (Wang, Siu, & Hui, 2004; Valaei & Nikhashemi, 2017). The present paper focuses on establishing the impact of income sources split between earned money (wage, entrepreneurship, and scholarship/bursary) and received money (parents/relatives) on the buying decision of a fashion clothing brand, hypothesis H5 being proposed (see Table 1). Recurrent expenditure on clothes and buying frequency of clothes, as consumer behavioural characteristics, has been considered in clothing studies to explain decision-making processes for domestic and imported brands (Wang et al., 2004). The current study plans to uncover whether clothing buying frequency, measured using five levels, and the yearly expenditure on clothes, measured using five levels, influence the buying decision of one fashion clothing brand, hypotheses H6 and H7 being prompted (see Table 1).

2.3. Brand loyalty and Generation Y

Fashion clothing brand loyalty in the case of Generation Y has been covered in the literature, in most situations in connection with the status rendered by the brand or its impact on the buyer's image, O'Cass *et al.* (2013) emphasising the willingness of buyers to pay extra for the brand significance, these situations being suitable examples of high buying involvement (Kapferer & Laurent, 1983). However, the literature on Generation Y brand loyalty is split, ranging from loyalty to disloyalty in general, or regarding various product categories. Debard (2004) found that Generation Y individuals were loyal to institutions, while Lodes and Buff (2009) posited an overall disloyal tendency in the case of this cohort with loyalty being

found for more expensive products, such as laptop computers (Lodes & Buff, 2009). In view of these findings, this study attempts to uncover whether the age layer of 25 to 29 years old is characterised by fashion clothing brand loyalty or brand inertia (no particular interest in a brand), drawing from the work of Odin et al. (2001), by testing the purchase intention of one brand measured through frequency against the brand reputation in the last hypothesis of this study H8 (see Table 1).

Table 1. Research hypotheses of the study

H1	Generation Y (25-29 years old) consumers are more likely to buy one fashion clothing brand from a product category based on emotional motives rather than functional ones.
H2	Generation Y (25-29 years old) consumers are more likely to use personal sources rather than non-personal sources when purchasing one fashion clothing brand from a product category
H3	Generation Y (25-29 years old) consumers are more likely to use online sources rather than offline sources to inform themselves when buying one fashion clothing brand from a product category
H4	Women between 25 and 29 years old are more likely to buy more frequently one fashion clothing brand from a product category than men
H5	People between 25 and 29 years old buying clothes with earned money tend to buy more frequently one fashion clothing brand from a product category than those buying with given money
H6	People between 25 and 29 years old buying clothes least frequently tend to buy more frequently one fashion clothing brand from a product category than those buying clothes more often
H7	People between 25 and 29 years old spending the least on clothes in one year tend to buy more frequently one fashion clothing brand from a product category
H8	There is a direct relationship between the buying frequency of one fashion clothing brand from the same product category and brand reputation in the case of Generation Y consumers (25-29 years old)

Source: own research (derived from literature)

Based on the research hypotheses, the conceptual model is presented in Figure 1.

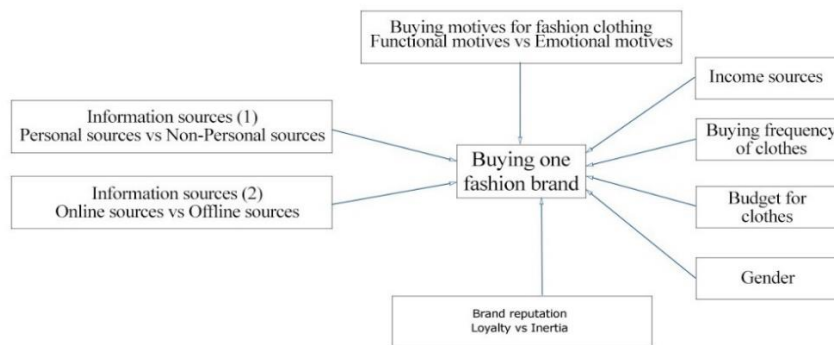


Figure 1. Conceptual model
(source: own research based on literature)

3. Research methodology

The research methodology entailed using a step-by-step approach of a series of logistic regressions in order to obtain a holistic view of buying behaviour antecedents using buying frequency of one fashion clothing brand from a product category (very often or often versus seldom or never) as the dependent variable,

adding at each step a new set of independent variables to the significant ones uncovered in the previous step (documented in Edu, Duffett, Negricea and Haydam (2021)).

The purpose of logistic regression is the same as in any other type of regression, namely, the identification of that model that describes the relationship between a dependent variable and one or more independent variables. The major difference in the case of logistic regression is that the dependent variable is binary or dichotomous, an aspect that we find both in the hypotheses and in the form of the model. If the dependent variable is continuous, the expected value of y is the conditional mean of y , having a vector of covariates x , and a linear equation is used:

$$\hat{Y} = E(Y|x) = \beta_0 + \beta_1 x_1 + \dots + \beta_p x_p \quad (1)$$

If y were a dummy variable ($Y = \{0,1\}$), $E(Y|x) = \pi(x)$ would be the conditional probability that $y = 1$, conditional on the covariate vector x . If we approach linear regression for $\pi(x)$, we could get predicted values outside the range $[0,1]$, and we would even violate the OLS assumptions. The accepted alternative is to identify a non-linear function $g(\pi(x))$ that can generate a linear regression model. Also, the inverse of the function $g^{-1}(g(\pi(x)))$ can generate values in the range $[0,1]$. In GLMs (Generalised linear models that follow the application of simple linear regression for a wide range of data types with non-normal distributions), the functions $g(\pi(x))$ are called link functions, and the best known are logit and probit. The other two components of GLMs are the random component and the systematic component, and the connection between them is made through the link function. The systematic component represents the relationship between the predictor variables and the mean of the responses. The random component represents how the response values are distributed around their mean, which is related to the predictor values by the link function. The probability density function has the following form:

$$f(y_i; \theta_i) = a(\theta_i) b(y_i) e^{[y_i Q(\theta_i)]}. \quad (2)$$

In general, the non-linear relationship between x and $\pi(x)$ can be described by an S-shaped curve, and the best known such curve is given by the logistic regression model and has the relationship:

$$\pi(x) = \frac{e^{\beta_0 + \beta_1 x_1 + \dots + \beta_p x_p}}{1 + e^{\beta_0 + \beta_1 x_1 + \dots + \beta_p x_p}} \quad (3)$$

If β is positive, we have a direct relationship, and when β is negative, we have an inverse relationship between x and $\pi(x)$. The odds are:

$$\frac{\pi(x)}{1 - \pi(x)} = e^{\beta_0 + \beta_1 x_1 + \dots + \beta_p x_p} \quad (4)$$

and the log odds lead to a linear relationship which is actually the link function, called logit:

$$g(\pi(x)) = \text{logit}(\pi(x)) = \ln\left(\frac{\pi(x)}{1 - \pi(x)}\right) = \beta_0 + \beta_1 x_1 + \dots + \beta_p x_p \quad (5)$$

Therefore, we are talking about a GLM that has a binomial random component and a logit link function. We have taken into consideration the fact that the complexity of the causal relationships between independent variables can create

difficulties with causal analysis. Such a challenge can be addressed by reducing or simplifying the dimensionality of the causal space, effectively reducing the number of axes required for object representation in space. By applying PCA (Principal Component Analysis), an attempt is made to transform the initial characteristics of the objects aiming for an optimal representation while reducing characteristics. In our case, PCA is an intermediate step, where the principal components represent the input for logistic regression.

Considering an initial causal space determined by n explanatory variables x_1, x_2, \dots, x_n , the goal is to transform the object x into an object w that belongs to a new vector space of the same dimension. After this transformation, the object's coordinates will be modified. Speaking of real vector spaces, the transformation will be linear and will have the form:

$$\mathbf{w} = A^t \cdot \mathbf{x} \quad (6)$$

where A is a square matrix of real numbers, of the size of the initial causal space. Thus, the principal components w_i are defined in relation to the original variables, using a linear relationship:

$$w_i = \alpha_1^{(i)} \cdot x_1 + \alpha_2^{(i)} \cdot x_2 + \dots + \alpha_n^{(i)} \cdot x_n \quad i = 1, 2, \dots, n \quad (7)$$

The coefficients $\alpha_j^{(i)}$ of the matrix A are the coordinates of the eigenvectors corresponding to the covariance matrix of the original variables x_1, x_2, \dots, x_n , while the eigenvalues of this matrix give the variance of the principal components. Given that any principal component w_i is generated by a linear transformation of the elements of the vector x , normally distributed with mean μ and covariance matrix Σ , w_i will be a normally distributed random variable:

$$w_i \sim N \left[(\alpha^{(i)})^t \cdot \boldsymbol{\mu}, (\alpha^{(i)})^t \cdot \Sigma \cdot \alpha^{(i)} \right] \quad i = 1, 2, \dots, n. \quad (8)$$

The mathematical model of PCA will be defined:

$$\begin{cases} \max_{A \in M_{n \times n}} \text{Var}(\mathbf{w}) \\ \mathbf{w} = A^t \cdot \mathbf{x} \end{cases} \quad (9)$$

The variance of each principal component w_i is the maximum variance relative to the variances of the original variables and is represented by the eigenvalue λ_i of the covariance matrix. Determining the principal components is an extreme value problem, where the unknowns are represented by the unit length vector $\boldsymbol{\alpha}$ ($\boldsymbol{\alpha}^t \cdot \boldsymbol{\alpha} = 1$), and the optimal criterion is given by maximising the variance of the principal components, so that they take on the entire variability of the initial causal space:

$$\begin{cases} \max_{\boldsymbol{\alpha}} \boldsymbol{\alpha}^t \cdot \Sigma \cdot \boldsymbol{\alpha} \\ \text{SR: } \boldsymbol{\alpha}^t \cdot \boldsymbol{\alpha} = 1 \end{cases} \quad (10)$$

Ionescu and Ruxanda (2012) showed that this conditional extremum problem can be reduced to a free extremum problem and solved using the Lagrange multipliers method:

$$L(\boldsymbol{\alpha}, \lambda) = \boldsymbol{\alpha}^t \cdot \Sigma \cdot \boldsymbol{\alpha} \cdot \lambda (\boldsymbol{\alpha}^t \cdot \boldsymbol{\alpha} - 1) \quad (11)$$

The necessary extremum conditions for the Lagrangean function are:

$$\begin{cases} \frac{\partial L(\alpha, \lambda)}{\partial \alpha} = 0 \\ \frac{\partial L(\alpha, \lambda)}{\partial \lambda} = 0 \end{cases} \Leftrightarrow \begin{cases} 2 \cdot \Sigma \cdot \alpha - 2 \cdot \lambda \cdot \alpha = 0 \\ \alpha^t \cdot \alpha - 1 = 0 \end{cases} \Leftrightarrow \begin{cases} \Sigma \cdot \alpha = \lambda \cdot \alpha \\ \alpha^t \cdot \alpha = 1 \end{cases} \quad (12)$$

For each λ_i among the n eigenvalues of the covariance matrix Σ , we will have one solution to the maximisation problem, namely one vector $\alpha^{(i)}$ and therefore one principal component w_i . If we order the eigenvalues of the covariance matrix Σ , we will have:

$$\lambda_1 \geq \lambda_2 \geq \dots \geq \lambda_n. \quad (13)$$

The first principal component w_1 will have the maximum variance λ_1 and will be determined by the relationship:

$$w_1 = (\alpha^{(1)})^t \cdot x. \quad (14)$$

The second principal component, w_2 will be uncorrelated with w_1 and will have the maximum variance. The principal components w_1, w_2, \dots, w_n ensure the total variance of the original variables x_1, x_2, \dots, x_n is conserved:

$$\sum_{i=1}^n Var(x_i) = \sum_{i=1}^n Var(w_i) \Leftrightarrow \sum_{i=1}^n \sigma_{ii} = \sum_{i=1}^n \lambda_i \quad (15)$$

The first logistic regression used as independent variables the factors resulting after performing factor analysis on buying motives, the second logistic regression preserved the significant motivational factors and included information sources, while the third one preserved the significant consumer behaviour constituents and included, also, age, income sources, buying frequency of clothes, and budget for clothes in the last 12 months. The final logistic regression used brand reputation (one of the 13 buying motives) as the independent variable to establish whether there was brand loyalty or not. Also, correlations between brand reputation and the significant independent variables were performed. The buying frequency of one fashion clothing brand from a product category was measured through a nominal scale displaying degrees of buying frequency of one brand collapsed into two major categories (very often or often versus seldom or never). For buying motives, 13 five-level semantic differential scales were built to measure the importance of each motive in the buying decision (5= Very important and 1= Very unimportant), drawing from the works of Bakewell and Mitchell (2003); Kinley et al. (2010), and Sullivan et al. (2012), while for information sources, 9 five-level semantic differential scales were built to measure the usage tendency of information sources and buying tendency from store types (5= Always and 1= Never), drawing from the work of Kinley et al. (2010). The demographic variables were measured using categorical scales (gender, income sources- (yes/no) for parents/relatives; wage; entrepreneurship; scholarship/bursary). The behavioural variables included the buying frequency of clothes, derived from the dependent variable of Pentecost and Andrews (2010), with five levels (once a week, once a month, once every three months, once every six months and once a year), and budget for clothes, derived from Won Jeong, Fiore, Niehm, and Lorenz's (2009) sample description, with five levels, expressed in EUR but converted and rounded up into Romanian Lei and South African Rands (ZAR) (the base

being: <200 EUR, 201-333 EUR, 334-667 EUR, 668-1000 EUR and >1001 EUR). After piloting 60 questionnaires in Romania and South Africa, the five-level scales for information sources were replaced with two-category scales (yes/no) as respondents found discriminating between scale levels to be difficult.

Samples of 400 individuals aged 25 to 29 years old from Romania and South Africa were employed. Drawing from the work of Edu et al. (2021), the sampling methodology used in this study was a random one based on a mixture between stratified (based on gender layers) and systematic approaches (every other 10th person being selected), the data collection being performed using shopping mall-intercepts based on a questionnaire administered in four malls in Bucharest and Cape Town. Thus, the sample for South Africa included 203 men and 197 women, while the Romanian sample included 205 men and 195 women.

4. Data analysis and results

Using PCA and a Varimax rotation and considering factor loadings of minimum 0.40 (Field, 2009) and a Cronbach Alpha higher than 0.7 (Nunnally, 1978), the 13 buying motives were collapsed into four factors for Romania (Table 2), named: Pleasure and Fun (F1), Rational buying (F2), Wearing to impress (F3), and Value for money (F4), as well as for South Africa. These four factors are: Rational buying (F1), Buying to be fashionable (F2), Buying to be noticed (F3), and Recreational buying (F4) (Table 2).

Table 2. Principal Component Analysis- Romania and South Africa

Buying motives	ROMANIA- Rotated Component Matrix ^a				SOUTH AFRICA- Rotated Component Matrix ^a			
	Component				Component			
	F1	F2	F3	F4	F1	F2	F3	F4
Desire of acquiring a new item	.692					.757		
Seasonal wardrobe renewal		.419				.571		
Desire to be trendy	.721					.614		
Self-image	-	-	-	-			.450	
Socialising	.711							.671
Leisure	.784							.795
Price				.570	-	-	-	-
Brand reputation			.680		.495	.566		
Wearing occasion			.729				.824	
Matching with another item				.669			.771	
Fabric		.838			.793			
Design				.435	.742			
Manufacturing (cutting, printing, labelling etc)		.804			.705			
Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalisation.								
Note A: Rotation converged in 5 iterations.								
Note B: Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.688 (Romania); 0.804 (South Africa); Bartlett's Test of Sphericity- Sig.< 0.001								
Note C: Cronbach Alpha: >0.70 for all factors and between factors								

Source: own research

The motivational factors, were regressed against the declared buying frequency of one fashion clothing brand for Romania, while for South Africa, another variable (Price) was added as a predictor, as, although it did not load into a factor, its factor loading, higher than the threshold set for the Principal Component Analysis (Field, 2009), rendered price a potential principal variable (Cumming & Wooff, 2007), meaning a potential important variable for the purpose of this study. Sequential logistic regressions were used as information sources and, subsequently, descriptive and behavioural variables were introduced as independent variables in order to comply with the statistical assumptions about errors, sample size, outliers, absence of multicollinearity, and linear relationships between predictors and their logs (compiled in Haydam, Purcarea, Edu & Negricea, 2017), a special attention being paid to the sample size one.

For the Romanian sample, the most comprehensive model, meeting the logistic regression assumptions, includes three significant variables (Wald tests, $p < 0.001$ for the second variable and $p < 0.01$ for the first and third variables) (Table 3, Figure 2). The impact of each of the three variables on buying often or very often one fashion clothing brand is described based on odds ratio. Thus, *F4 (Value for money)*, with an odds ratio of 1.536, shows that an increase of one unit on the measurement scale of the factor increases the odds of buying often or very often one fashion clothing brand by a multiplicative factor of 1.536. The variable *magazines*, with an odds ratio of 2.897, shows that individuals using magazines to inform themselves about fashion clothing are 2.897 times more inclined to buy often or very often one fashion clothing brand than those who do not gather information from magazines. The variable *scholarship/bursary*, with an odds ratio of 0.120, shows that individuals that do not buy clothes using such financial sources are 8.333 times more inclined to buy one fashion clothing brand often or very often than those buying clothes using these types of sources.

Table 3. Logistic regression- declared buying frequency of one fashion clothing brand-ROMANIA

Variables in the equation	B	S.E.	Wald	df	Sig.	Exp (B)	95% C.I. for EXP(B)	
							Lower	Upper
F4 (Value for money)	.429	.125	11.845	1	.001	1.536	1.203	1.961
Magazines	1.064	.284	14.020	1	.000	2.897	1.660	5.056
Scholarship/ bursary	-2.120	.732	8.388	1	.004	.120	.029	.504
Constant	.714	.131	29.808	1	.000	2.043		

Note A: Hosmer and Lemeshow Test- non-significant value ($p > 0.05$)
 Note B: Chi-square = 32.973 ($p < 0.001$), Nagelkerke R Square = 0.113, correctly classifying 74.8% of the cases

Source: own research

For South Africa, the most comprehensive model, meeting the logistic regression assumptions, includes 5 significant variables (Wald tests, $p < 0.001$ for the fifth variable, $p < 0.01$ for the first two variables, and $p < 0.05$ for the third and fourth variables) (Table 4, Figure 2). *F1 (Rational buying)*, with an odds ratio of 1.480, shows that an increase of one unit on the measurement scale of the factor increases the odds of buying often or very often one fashion clothing brand by a multiplicative factor of

1.480. The variable *celebrities*, with an odds ratio of 1.887, shows that individuals looking up to celebrities about fashion clothing are 1.887 times more inclined to buy often or very often one fashion clothing brand than those who do not do so, and the variable *TV advertisements*, with an odds ratio of 0.610, shows that individuals that do not consider them as information sources tend to be 1.639 times more inclined to buy often or very often one fashion clothing brand than those who consider TV advertisements as information sources. The variable *budget for clothes per year* (significant overall at <0.05), with an odds ratio of 2.474 (significant at <0.01 for this category), displays that buyers allocating for clothes between 3001 and 5000 ZAR (1 EUR = 15 ZAR) are 2.474 times more inclined to buy one fashion clothing brand often or very often than those allocating less than 3000 ZAR, while the variable *buying frequency of clothes* (significant overall at $p < 0.001$), with odds ratios of 0.531 (significant at <0.01 for this category), 0.254 (significant at <0.001 for this category) and 0.383 (significant at <0.01 for this category), shows that consumers buying clothes about once a week are 1.883 times more inclined to buy one fashion clothing brand often or very often than those buying about once a month, 3.937 times more inclined than those buying about every 6 months and 2.611 times more inclined than those buying about once a year.

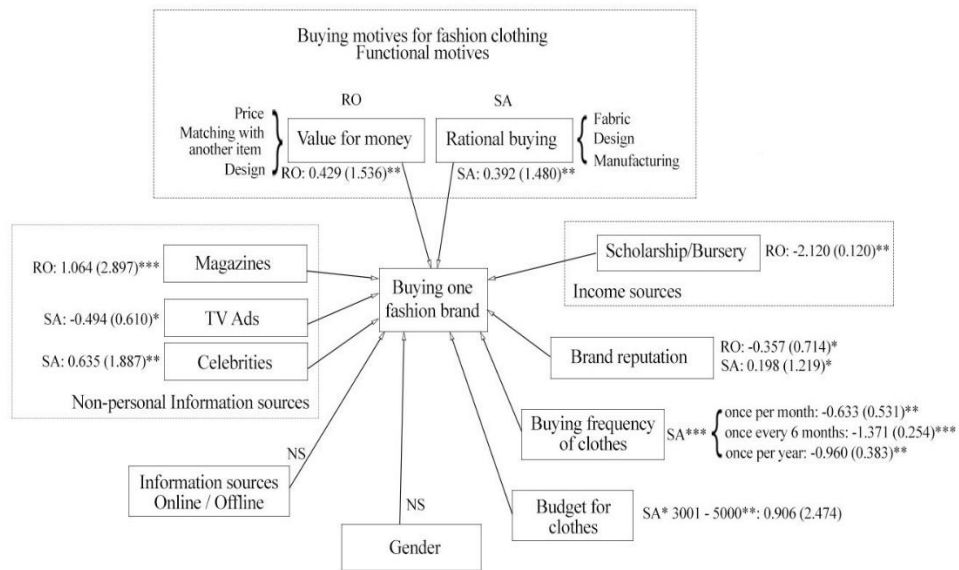
Table 4. Logistic regression- declared buying frequency of one fashion clothing brand- SOUTH AFRICA

Variables in the equation	B	S.E.	Wald	df	Sig.	Exp (B)	95% C.I. for EXP(B)	
							Lower	Upper
FI(Rational buying)	.392	.119	10.892	1	.001	1.480	1.173	1.868
Celebrities	.635	.220	8.301	1	.004	1.887	1.225	2.908
TV Advertisements	-.494	.227	4.741	1	.029	.610	.391	.952
Budget for clothes -1 year (ZAR); <= 3000			10.337	4	.035			
3001-5000	.906	.314	8.311	1	.004	2.474	1.336	4.580
5001-10000	.405	.345	1.376	1	.241	1.500	.762	2.951
10001-15000	-.364	.545	.446	1	.504	.695	.239	2.021
15001+	-.595	.906	.432	1	.511	.551	.093	3.257
Buying frequency of clothes-1 year; once per week			26.750	4	.000			
Once per month	-.633	.223	8.065	1	.005	.531	.343	.822
Once every 3 months	-.379	.231	2.692	1	.101	.685	.436	1.076
Once every 6 months	-1.371	.312	19.253	1	.000	.254	.138	.468
Once per year	-.960	.350	7.537	1	.006	.383	.193	.760
Note A: Hosmer and Lemeshow Test- non-significant value ($p > 0.05$)								
Note B: Chi-square = 60.055 ($p < 0.001$), Nagelkerke R Square = 0.186, correctly classifying 64.8% of the cases								

Source: own research

Finally, in an attempt to delineate whether brand loyalty can be revealed, the influence of brand reputation on the buying frequency of one fashion clothing brand (often or very often versus seldom or never) was tested using logistic regression. Based on the significant findings and following the assumption tests, in the case of Romania (Chi-square-6.551/ $p < 0.01$, Nagelkerke R Square-0.023, Wald test, $p < 0.05$), with an odds ratio of 0.714, a decrease of one level

on the 5-level semantic differential scale used to measure brand reputation, increases the odds of buying often or very often one fashion clothing brand by 1.400 times, while in the case of South Africa (Chi-square-5.266/ $p < 0.05$, Nagelkerke R Square-0.018, Wald test, $p < 0.05$), with an odds ratio of 1.219, the multiplicative factor is 1.219, the relationship being a direct one, both increasing at the same time (Figure 2). The findings for the two countries are contradictory, as only in the case of the South African sample, brand reputation is prompted as an important buying antecedent of buying often or very often one brand, and, as a consequence, brand loyalty can be inferred just in this case.



Note: a. RO- Romania; SA- South Africa; b. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; NS- not significant

Figure 2. Research findings

(source: own research)

Investigating further, correlations between the statistically significant independent variables pertaining to motivation, information sources, demographics and behavioural aspects and brand reputation were performed using Kendall's tau b and Cramer's V coefficients. In the case of Romania, no significant correlations were found, while for South Africa, significant correlations ($p < 0.01$) were identified based on Kendall's tau b coefficients with the variables included in the motivational factor (fabric, design, and manufacturing (cutting, printing, labelling, etc.)), all being positive and weak (values between 0.203 and 0.279) and based on Cramer's V coefficients with the *buying frequency of clothes* (0.139, $p < 0.05$) and *celebrities* (0.281, $p < 0.01$), both being weak according to Field (2009). These results reinforce, on the one hand, the contradictions between the two samples, while, on the other hand, they support the findings regarding the impact of brand reputation on the buying behaviour in the case of the South African sample.

5. Discussions and testing of hypotheses

Only one motivational factor for each sample was found to be statistically significant against the declared buying frequency of one fashion clothing brand measured based on two categories, often or very often (as the explained category) versus seldom or never. Thus, for the Romanian sample, the factor was *Value for money* (comprising price, matching with another item, and design), while for the South African one, the factor was *Rational buying* (including fabric, design, and manufacturing). The direct relationships between the motivational factors and the dependent variable display a clear tendency of rationality in the buying behaviour for both samples, thus, a rejection of hypothesis H1 (see Table 1) can be assumed. This rational tendency matches to a certain extent findings appropriate for the entire Generation Y, Bakewell and Mitchell (2003) pointing out value for money or low prices in their study on Generation Y women's motives for buying fashion clothing, Watchraverigkan et al. (2010) emphasises use and usefulness as important buying motives of innovative fashion products, while Valaei and Nikhashemi (2017) underlining style (design) and price amongst the most important building blocks of apparel buying intention. However, these findings contradict the results of Sullivan et al. (2012), as shopping effectiveness or efficiency were not very appreciated by cognitive Generation Y buyers of fashion clothing. From another angle, these results do not support the findings of other studies on this cohort supporting the importance of emotional/hedonic motives in the buying decision of fashion clothing (Bakewell & Mitchell, 2003; Sullivan et al., 2012). An explanation for this rational approach to buying fashion clothing could come from the perspective that this age layer (25-29 years old) tends to prioritise needs differently than other groups (Duncan, 2016), providing further insight into the heterogeneity of Generation Y.

Personal and non-personal *information sources* were tested. In both cases, Romanian and South African samples, only non-personal information sources were found statistically significant. These findings led to the rejection of hypothesis H2 (see Table 1). These results contradict the conclusions underlined by Kinley et al. (2010) for Generation Y, as they found that female friends and coworkers were highly appreciated for advice in fashion clothing purchasing. An explanation for this result might be that this age group (25-29 years old) likes to be independent (Duncan, 2016), its members ordering their priorities differently than older groups, thus explaining to a certain extent the non-existence of a relationship between parents as information sources and the buying decision. However, the statistically significant non-personal information sources uncovered in both samples match findings of previous studies on the entire Generation Y. Thus, *magazines* (prompted by the Romanian sample), displaying a direct relationship with the dependent variable, and *TV advertisements* (prompted by the South African sample), reflecting an indirect relationship, were highlighted by Kinley et al. (2010) as information sources used by Generation Y highly involved shoppers of fashion clothing. The relevance of TV advertisements in this study should be cautiously assessed as the relationship with the dependent variable was an inverse one, TV ads, based on further testing, actually displaying a direct relationship with the other category of the dependent variable, buying one brand

seldom or never, underlining a rather low involvement behaviour. *Celebrities*, on the other hand, prompting a direct relationship with the dependent variable, were underlined as sources with a high impact on the buying behaviour of Generation Y (Kinley et al., 2010). A very interesting situation was prompted by the fact that no online source was found statistically significant in both samples, thus leading to the rejection of hypothesis H3 (see Table 1). These findings contradict the ones prompted by Kinley et al. (2010), as they found Internet stores to be used significantly more often for information purposes by highly involved buyers. Although difficult to explain, the missing relationship between the online sources and the buying behaviour of this age group should be assessed in conjunction with the underlying buying motives of fashion clothing which are rational, so, the buying involvement being of a lesser intensity.

Gender was not found significant in any situation, leading to the rejection of hypothesis H4 (see Table 1). The findings contradict those of Valaei and Nikhashemi (2017), their conclusions pointing out gender differences, together with age and income, in fashion clothing attitude formation and purchase intention in the case of Generation Y buyers considering a number of decision criteria. However, these results are to a certain extent in line with the conclusions of Khare and Rakesh (2010) regarding apparel preferences as no significant differences in fashion clothing involvement between men and women were uncovered in their study. Moreover, the findings of this study could be explained in connection with the rational buying motives displayed by both samples, considering that conspicuousness, which is an effect sought-after by women (Bakewell & Mitchell, 2003), is directly linked to emotional buying motives (O’Cass et al., 2013). Income sources were found to be statistically significant only in the case of the Romanian sample, with the *scholarship/bursary* option. However, hypothesis H5 (see Table 1) was rejected as the relationship between the dependent variable and the income source was an inverse one; thus, based on further testing, people paying from their scholarship/bursary for fashion clothes would tend to buy seldom or never one brand. These findings tend to support the rational buying behaviour, as shoppers sourcing from scholarship/bursary tend to display a rather low involvement behaviour. As prior evidence on the impact of income sources on the buying behaviour of fashion clothes is scarce, the findings cannot be commented against previous findings. *Buying frequency of clothes* turned out to be statistically significant in the case of the South African sample against the buying frequency of one fashion clothing brand. However, the relationship with the first level of the scale (buying about once a week) indicated an inverse relationship between the variables, reflecting, thus, a high apparel buying frequency. Hence, based on the findings, hypothesis H6 (see Table 1) was rejected. A recurrent behaviour is displayed in this work, as people buying more often (about once a week) tend to buy rather one brand often or very often, extending on the work of Wang et al. (2004) as they found a relationship between buying frequency and a tendency towards buying imported clothing brands. The recurrent behaviour should be assessed together with the impact of brand reputation on the buying behaviour to be able to conclude whether the case is that of brand loyalty or just buying inertia (Odin et al., 2001). Similarly, with the buying frequency, a statistically significant relationship between the dependent variable and the *yearly budget for clothes* was found in the case of the South African

sample. However, because the relationship was significant with the second lowest level of the scale (spending between 3001 and 5000 ZAR) and not with the lowest level (less than or equal to 3000 ZAR), hypothesis H7 (see Table 1) was rejected. The findings tend to strengthen the rather rational buying behaviour of this age group, as the expenditure on clothes is linked with the number of purchased brands, supporting the findings of Wang et al. (2004), underlining a utilitarian behaviour with shoppers spending less on clothes tending to buy based on price rather than fashionability. Again, money spent on clothes should be assessed together with the influence of brand reputation on the buying behaviour to be able to conclude whether brand loyalty is prompted or just buying inertia (Odin et al., 2001).

Brand reputation showed a significant relationship with the buying frequency of one brand. However, in the case of the Romanian sample the relationship was an inverse one, and based on further testing, actually brand reputation was found to explain the tendency of buying one brand seldom or never. In an attempt to give more weight to this finding, correlations were made between the independent variables found significant in the model and brand reputation, but no significant correlations were found. Therefore, the conclusion was that brand loyalty could not be inferred in this case. However, on the other hand, there is not enough evidence to infer, also, a lack of interest in a particular brand (brand inertia). In the case of the South African respondents, a direct relationship was found between buying one brand often or very often and brand reputation. This relationship was assessed in concordance with possible correlations between brand reputation and the significant independent variables explaining buying often or very often one clothing brand. Thus, significant positive but weak correlations were uncovered with the rational constituents of the motivational factor (fabric, design and manufacturing) and significant weak ones with buying frequency of clothes and celebrities. Considering, also, the direct relationship between buying frequency of clothes and celebrities with buying one brand often or very often, brand loyalty can be inferred in the case of the South African sample (based on the theories of Odin et al. (2001) and Kapferer & Laurent (1983), but founded on rational motives. Thus, hypothesis H8 (see Table 1), centred on brand loyalty, was retained for the South African sample and rejected for the Romanian one.

In summary, this study extends the contradictions found in the literature on Generation's Y loyalty or disloyalty (Debard, 2004; Lodes & Buff, 2009) toward brands, in general or in various categories, to the age group between 25 and 29 years old, considering the differences between the two samples. However, overall, as discussed previously, a rational buying behaviour can be established for both samples, thus displaying similar preoccupations when purchasing fashion clothes in the case of the two nationalities. More importantly, these findings complete the results of Edu et al. (2014) centred on the similarities in budget allocation for clothes displayed by Romanians and South Africans between 20 and 29 years by exhibiting buying motives and information sources considered by a part of this age group (people between 25 and 29 years old) when buying fashion clothing.

6. Conclusions

The aims of this paper were to assess the impact of buying antecedents on the buying behaviour of fashion clothing and whether brand loyalty could be established in the case of one segment within Generation Y, that of individuals between 25 and 29 years of age. Buying motivations and information sources were evaluated and, in order to give more weight to the findings, gender, income sources, the yearly budget, and the buying frequency of clothes were added as explanatory variables. The model was tested using two nationalities, Romanian and South African, drawing from the findings of Edu et al. (2014), which supports that Romanians and South Africans between 20 and 29 years old would be inclined to display similarities in budget allocation for clothes. The findings on fashion clothing brand loyalty are contradictory. Using the concepts of Odin et al. (2001) and Kapferer and Laurent (1983), brand loyalty, being determined based on purchasing frequency and the impact of brand reputation on the buying decision, was identified only in the case of the South African sample, this situation reflecting the brand loyalty-disloyalty contradiction found in the literature for the entire Generation Y (Debard, 2004; Lodes & Buff, 2009). The buying motives, supporting the acquisition of one brand often or very often, for both samples are rational, being centred on product features, price, and the matching possibility with other products. The information sources uncovered to have a direct influence on buying often or very often one brand were magazines (Romanian side) and celebrities (South African side), while TV ads (South African side) had a direct influence on buying seldom or never one fashion clothing brand. Only one income source displayed a significant relationship with buying frequency of one brand, scholarship/bursary (Romanian sample), but it explained that people paying with money from these sources tended to buy one brand seldom or never. The budget for clothes and the buying frequency of clothes turned out to be statistically significant variables only in the case of the South African sample, with people allocating between 3001 and 5000 ZAR per year (the second lowest level on the applied scale) being the ones buying one brand often or very often and those buying clothes about once a week being the ones more likely to buy one brand often or very often. In summary, this study enriches the literature, first of all, by providing an image inside Generation Y, about the buying behaviour of fashion clothes which is centred on rational motives, supported by a very important antecedent (information sources) and explained based on demographics and behavioural variables, and, secondly, by extending the heterogeneity idea marking Generation Y to this age segment (25-29 years old), as differences in brand loyalty were discovered for the two nationalities under investigation.

From a business perspective, managers can make use of the findings to develop effective strategies for targeting people between 25 and 29 years old, positioning their fashion clothing brands especially on functional buying motives, such as product traits or price. In order to communicate effectively to this age group, managers should plan and implement their marketing communication using magazines or endorsers, especially to inspire this group. In addition, managers can try to push their offers to this age segment and increase the buying frequency of their brand by attempting to position the brand based on value for money and by advertising in magazines using rational rather than emotional messages. However, although similarities were uncovered pertaining to the

buying motives of fashion clothes, managers should take into account different nationalities when tailoring their international marketing endeavours

Research limitations can be identified, but they can represent suitable future research directions. First of all, the declared behaviour regarding buying frequency of one brand was measured. However, the proposed model can be improved if the number of brands purchased from one clothing category (O’Cass, 2004) within a period of time is used as a dependent variable in the model. If findings from both angles are close, then confidence in the model increases significantly, as the variety-checking behaviour can be examined (Odin et al., 2001) and differentiations can be drawn between brand inertia and the tendency of buying several brands. Secondly, although categorical scales were employed in this study for information sources to avoid confusion on the respondents’ side, the original five-level scales should be tested first in other studies in order to measure tendencies. Besides building on the aforementioned limitations, future research endeavours could be pursued by including other independent variables. The model can be enriched by including shopping venues as buying decision antecedents (Sullivan et al., 2012), educational level (Wang et al., 2004), and other behavioural variables, such as domestic versus imported brands (Wang et al., 2004) or product country of origin (Valaei & Nikhashemi, 2017), or time spent shopping (O’Cass, 2004). Therefore, model replications for other nationalities should include these variables for a better understanding of this age group.

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