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Demographic-induced differences in selected South African millennial shoppers' decision-making styles

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ABSTRACT

Purpose of the study: This study aims to ascertain demographic-induced differences in South African millennial shoppers' decision-making styles. Particularly, the study seeks to establish the decision-making styles of millennial shoppers from Durban, South Africa.

Design/methodology/approach: The study employed a quantitative approach and collected data through a non-probability sampling technique wherein 320 millennial shoppers from Durban, South Africa, successfully participated in the investigation. Exploratory factor analysis, multivariate, univariate, and post-hoc testing were used to analyse the study results.

Findings: The findings affirm distinctions in how millennials make decisions based on varying demographic aspects, namely age, gender, marital status, ethnicity and education. Additionally, the results corroborate an adapted consumer styles inventory derived from Sproles and Kendall's original version. Variations in decision-making procedures, such as a lack of price consciousness and creative variety, were also discovered amongst South African millennial shoppers.

Recommendations/value: The study empirically confirmed demographic-based differences in South African millennial shoppers. Marketers must customise their offerings to reflect these demographic-induced differences among shoppers. Specifically, offerings should be tailored to cater for decision-making styles based on age, gender, marital status, ethnicity and education.

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Managerial implications: A sound understanding of millennial shoppers informs marketers to utilise demographic-induced differences for market segmentation, targeting and effective execution of the marketing mix.

Keywords: Consumer decision-making styles; consumer style inventory; demographics; South African millennials; and consumption patterns.

JEL Classification: JEL classification M30

1. INTRODUCTION

Consumer decision-making is typically depicted as going through the stages of recognising needs, collecting data, appraising alternatives, selecting what to buy and subsequent behaviour (Panwar *et al.*, 2019). Consumers have a variety of perceptions regarding the products and services accessible in the market they know of and typically employ varying decision-making steps and strategies contingent on the type of acquisition, extending from optimal selections to quicker decisions (Giráldez-Cru *et al.*, 2023; Ran *et al*., 2022). With the numerous brand alternatives, retail format choices, and the internet, which proffers a wealth of data that complicates customers' decision-making, most analysts have been fascinated by understanding consumer decision-making styles. Consumer decision-making styles are conceptualised as a psychological perspective of buyers that guides their shopping behaviour (Mishra, 2015). An in-depth knowledge of consumer decision-making styles improves market segmentation, formulation of the marketing mix and discriminating between positive and negative market perceptions (Abdel Wahab *et al*., 2023).

Existing research investigates the appropriateness of previously determined consumer decision-making styles in varied settings (Prakash *et al*., 2018; Tarnanidis *et al*., 2015). Others compare divergent decision-making styles across different generations or countries (Thangavel *et al*., 2022; Valaei & Nikhashemi, 2017). Several link decision-making styles to customer inventiveness (Mishra, 2015; Musasa & Moodley, 2020b). There are few contemporary studies on the effect of demographics on consumer decision-making styles from African emerging markets. Examples comprise South African studies (Potgieter *et al*., 2013; Mafini *et al*., 2014); Egypt (Abdel Wahab *et al*., 2023); and Botswana (Makgosa & Sangodoyin, 2018). Of the few studies that utilise demographics to showcase differences in decision-making styles, their variables are limited to age (Mafini *et al*., 2014), gender (Mehta, 2020) and culture (Islam & Chandrasekaran, 2020). In South Africa, only one study was conducted by Potgieter *et al.* (2013) concentrated on demographic dimensions of consumer decision-making styles focused on adult consumers rather than the millennial age group.

A precise knowledge of demographic-induced differences in decision-making styles boosts segmentation, targeting and marketing strategising (Makgosa & Sangodoyin, 2018). Thus, this study attempts to identify millennials' decision-making styles and assess disparities in decision-making styles over demographic variables such as gender, age, conjugal condition, origin, and education of South African millennials. An inquiry into the economically active millennials would be beneficial for marketing professionals. Millennials have become fiscally capable and constitute the mainstay of future consumption (Mafini *et al*., 2014). Compared to previous generations, this generation has been accompanied by a compulsive and impulsive attitude towards consumption (He *et al*., 2018; Cavazos-Arroyo & Máynez-Guaderrama, 2022; Tarka & Kukar-Kinney, 2022). Moving forward, more exploration in distinct surroundings to identify a classification of their decision-making styles is suggested.

2. LITERATURE REVIEW

2.1 Consumer decision-making styles

Researchers' fascination with shopping styles is kept alive with various contexts, generational distinctions, and other macro-environmental transformations. The Consumer Style Inventory (CSI), created by Sproles and Kendall (1986), is the most extensively utilised and empirically validated scale that estimates consumer decision-making styles (Mehta, 2020). A decision-making style is decoded as an intellectual attitude directing someone to select certain buying options (Sproles & Kendall, 1986). Furthermore, purchasers are perceived to mix decision-making styles over an extended and firm duration in shopping scenarios.

Empirical studies utilising the CSI in multiple contexts have validated the presence of eight decision-making styles across developed countries such as the United States, the United Kingdom, and New Zealand. In contrast, a few orientations were not confirmed, or new ones emerged in investigations in developing nations, including India, South Korea, and South Africa (Mehta & Dixit, 2016; Potgieter *et al.,* 2013). Conclusively, the CSI is a dependable frame that can easily adjust to different scenarios (Musasa & Moodley, 2020a).

The CSI comprises the following decision-making styles that explain distinct shopping orientations:

i. **Perfectionist/high-quality** consumers who are conscientious about the quality of goods and services on offer would not be content with something merely satisfactory. Rather, they conduct extensive research to track down the top-notch offerings (Sarkar *et al.*, 2019). When appraising quality, the cost-quality relationship may be taken into account (Abdel Wahab *et al*., 2023).

ii. **Brand-conscious** consumers who prefer expensive, renowned brands and use the price-quality relationship in making choices (Alavi *et al.,* 2016). Furthermore, this group utilises a brand's image to choose products online, and they are not price-sensitive (Abdel Wahab *et al*., 2023).

iii. **Price-conscious** consumers pursue price bargains. They are often aware of sale prices and would opt for 'value for money' deals. This cohort browses sales promotions regularly to keep track of prices and improve chances of getting bargains (Rezaei, 2015).

iv. **Habitual/brand-loyal** consumers prefer routines in their buying decisions. They shop from the same stores or websites and purchase the same brands. Past positive shopping experiences reinforce their subsequent buying decisions. Abdel Wahab *et al.* (2023) indicate that they often utilise the least of their cognition.

v. **Impulsive/careless** consumers neither plan their purchases nor care about their spending. They do not consider alternatives to find the best value for money and are less concerned about the quality of offerings. Nevertheless, they are the most remorseful cohort that expresses their need to plan better.

vi. **Recreational/hedonistic** consumers find shopping enjoyable. Searching, evaluating, and finding products motivates them (Mafini *et al.*, 2014). Rezaei (2015) identifies that this cohort improves their shopping experience by not planning for it and studying offerings more.

vii. **Novelty fashion-conscious** consumers like new merchandise. Innovative merchandise that keeps them up to date or in fashion interests them. They spend more time seeking trending merchandise. They buy lavishly to keep the image of being trendy (Haron & Chinedu, 2018).

viii. **Confused by overchoice,** consumers demonstrate confusion and a lack of confidence when shopping. They also endure information overload, hence the confusion. Unstable emotions and regret are witnessed amongst this cohort (Truta & Nitoiu, 2014).

2.2 Millennials and consumption patterns

Generational cohorts are believed to have shared and distinctive social personalities formed from past experiences (Thangavel *et al.*, 2022). Millennials, children of Baby Boomers (Generation X), are generally regarded as tech-adept for their heightened internet utilisation (Liu *et al*., 2019). Although there exist discrepancies regarding the exact start and end of the

millennial age range, a consensus indicates that such individuals were born between the early 80s and late 90s (Schiffman & Wisenblit, 2014); therefore, this current cohort is economically active and aged between 24 and 43.

For a few reasons, millennials have become a focus for sustained research. Firstly, Millennials have developed into a new market with more spending power than earlier generations (Bernardi, 2018), consequently making them the backbone of any marketing effort. Secondly, modern investigations on consumer behaviour when utilising immersive and disruptive technologies still utilise millennial samples (Angmo & Mahajan, 2024; Duarte & Albuquerque, 2024). Thirdly, their upbringing in a consumption-based culture implies that their shopping habits are dissimilar to those of prior cohorts (Thangavel *et al*., 2021). Finally, some dissertations predict that millennials have compromising shopping behaviour because of convenient credit options, extended trading hours and several virtual outlets (Rose & Dhandayudham, 2014; Zainudin *et al*., 2019).

Millennials spent approximately 22.5% of total global spending in 2024, which shows how significant their spending is (Visual Capitalist, 2024). Similarly, South African millennials in 2024 are equally influential (Business Tech, 2024). Nonetheless, limited information exists regarding the precise amounts associated with millennials in South African retail activities (Muposhi & Chuchu, 2022). Despite that, explanations point to more than 50% of total retail sales being attributed to millennials (Duh & Struwig, 2015). Moreover, millennials are well-off compared to other South African groups (Vannevel *et al*., 2018).

According to generational analysis theories, South African millennials are a transitioning generation in the wake of the apartheid regime who demonstrate contradicting consumption patterns to those of prior generations (Dobbelstein & Naidoo, 2020). Principally, marketing research that has been conducted on this group locally revolves around the application of technology (Thusi & Maduku, 2020; Ngubelanga & Duffett, 2021), shopping decisions during COVID-19 (Dobbelstein & Naidoo, 2020; Heyns & Kilbourn, 2022), environmentally sustainable purchasing (Dilotsotlhe, 2021; Ndofirepi & Matema, 2019) and a few segments on shopping styles (Mafini *et al*., 2014; Musasa & Moodley, 2020a; 2025b).

2.3 Demographic differences in consumer decision-making styles

Empirical evidence underscores the statistical significance of demographics on one's shopping orientation (Potgieter *et al*., 2013; Abdel Wahab *et al*., 2023). Apart from unique customer requirements, traditional marketing decision-making utilises demographics. Despite the significance of demographics in sound marketing decisions, literature linking demographics with consumer decision-making styles in African developing contexts is rare

(Potgieter *et al.*, 2013; Makgosa & Sangodoyin, 2018). Additionally, current studies connecting demographics with the consumer decision-making styles of young buyers are increasing (Abdel Wahab *et al*., 2023). Most of these investigations focus on gender differences (Mehta, 2020) or age (Mafini *et al*., 2014). Hence, it is put forward that:

$H1_0$: There are no significant differences in decision-making styles across demographic variables of millennial shoppers.

H_1: There are significant differences in decision-making styles across demographic variables of millennial shoppers.

2.3.1 Age

Potgieter *et al.* (2013) point out the importance of macro-environmental changes in the shopping orientation of consumers at different ages. Changes in purchase patterns are associated with age, as brand loyalty diminishes with age (Rani, 2014). Contemporary research confirms that age poses statistically significant differences in consumer decision-making styles (Potgieter *et al*., 2013; Anić *et al*., 2014; Makgosa & Sangodoyin, 2018). Hence, it is hypothesised that:

H_{1a}: There are significant differences in decision-making styles with different age ranges of millennial shoppers.

2.3.2 Gender

Dissimilarities between males and females are witnessed in processing information, preferences, perceptions and ultimately, behaviour (Mehta, 2020). It has been observed that women seem to prefer in-store shopping, whereas men are more inclined towards shopping online (Workman & Cho, 2013). It is further noted that the interpretation of good service and decision-making styles varies between men and women (Mehta, 2020), and the two genders respond differently to store environment cues (Borges *et al*., 2013).

Variations in decision-making styles due to gender orientation are reported. Potgieter *et al*. (2013) note significant mean levels of recreational, novelty/fashion, and high-quality consciousness in females compared to males. Likewise, Mehta (2020) discovered higher scores in women than men in recreational, novelty/fashion and price-value consciousness. Studies by Abdel Wahab *et al*. (2023), Mukherjee *et al*. (2012) and Mitchell and Walsh (2004) all correspond to gender-oriented differences in recreational, novelty/fashion and high-quality consciousness. In essence, literature consents to gender differences across two strands of shopping orientation, namely utilitarianism and hedonism. It is proposed that:

H_{1b}: There are significant differences in decision-making styles across different genders of millennial shoppers.

2.3.3 Ethnic background

An ethnic group for this study is conceptualised as the many cultural groups, customs, or races with which South African millennials identify. Studies posit differences in purchasing styles with different ethnicities (Ghazali *et al*., 2019; Ting *et al*., 2016). Ethnic groups are critical in effective marketing, especially in a multicultural society such as South Africa (Potgieter *et al.,* 2013). South Africa is known to have emerging black elites termed 'Black diamonds' due to their spending power, need for self-expression through brands and marketing opportunities they bring. Previous South African studies confirm the effect of ethnicity on shopping orientation. Radder et *al*. (2006) report that consumer decision-making styles differ among Setswana, Chinese and Caucasian shoppers, with the latter groups displaying utilitarian orientations than Batswana. Likewise, Potgieter *et al*. (2013), comparing African to Caucasian ethnic groups, discovered higher mean levels of hedonic traits among the former group. It is therefore proposed:

H_{1c}: There are significant differences in decision-making styles across different ethnic groups of millennial shoppers.

2.3.4 Marital status

Family structures contribute towards sound marketing segmentation and intelligence (Hanzaee, 2011). For this study, marital status was also measured in the family unit of each participant. However, most efforts on the effect of demographics on decision-making styles overlook the family unit. A comparison between married and non-married shoppers indicates married shoppers are more high-quality and fashion-conscious than their counterparts (Makgosa & Sangodoyin, 2018). Accordingly, we propose:

H_{1d}: There are significant differences in decision-making styles with differences in marital statuses of millennial shoppers.

2.3.5 Education level

A study by Potgieter *et al.* (2013) reports brand and price consciousness as much more prevalent with lower levels of education. Vipul (2010) notes a high likelihood of impulsiveness among the highly educated with high product awareness. Abdel Wahab *et al*. (2023) indicate statistically significant differences in decision-making styles with higher education levels in brand, novelty/fashion consciousness, impulsiveness, and confusion by over-choice. In essence:

H_{1e}: There are significant differences in decision-making styles with different education levels of millennial shoppers.

3. METHODOLOGY

This study aimed to ascertain differences in decision-making styles across demographic variables. Accordingly, a descriptive design was adopted for the study. A sample of 400 participants using non-probability convenience sampling was utilised. The selected sample size reflects the approach utilised by most empirical studies on consumer decision-making styles. Similarly, Bougie and Sekaran (2019) advocate for 300-500 participants as a reliable sample size for quantitative studies. However, the shortcomings of a non-probability convenience sample should not be understated as they limit the generalisation of results and risk homogeneity in the sample (Taherdoost, 2016). Overall, due to the limited time and resources available to researchers (Ahmed, 2024), the sampling technique was adopted.

An 80% (i.e., 320) response rate was achieved from the 400 structured questionnaires administered to South African millennial shoppers in Durban. Unlike past consumer decision-making style studies that utilised student samples, the non-student population was integrated. In keeping with research ethics, the participants were assured of voluntary participation, confidentiality, and the exclusion of minors. Willing individuals were given a fair chance to participate, with the inclusion criteria being millennial consumers from diverse backgrounds and residing in Durban. Consent from participants was sought prior to participation in the study.

Using SPSS version 29.0, tests for reliability and hypotheses were computed. The Cronbach alpha statistic, Kaiser Meyer Olkin Measure of Sampling Adequacy (KMO) and Bartlett's tests confirmed the reliability of the measuring tool. Inferential statistics were satisfied using exploratory factor analysis, MANOVA multivariate test and ANOVA test with post hoc Duncan pairwise comparison tests.

4. FINDINGS AND DISCUSSION

As depicted in Table 1, 63.1% of the research participants were female, with 36.9% being male. Age-wise, the youngest group of 18-25 years had the greatest showing at 67.2%, followed by 26-34 years at 15.9% and 35-38 years at 16.9%. A majority (58%) were single without dependents; 25.6% were single without dependents; 10.6% married with dependents; and 5.6% married without dependents. When it came to ethnicity, Africa represented the highest proportion with 55.3%, followed by India with 18.8%, Caucasians at 16.3% and

coloured with 9.7%, respectively. Most people had a tertiary qualification (80.7%), 15.9% held matriculation, and the remainder, 3.4%, had no qualifications.

Table 1: Demographic frequencies

Demographic variable		Frequency	Percentage
Gender	Male	118	36.9
	Female	202	63.1
	Total	320	100.0
Age (years)	18 – 25	215	67.2
	26 – 34	51	15.9
	35 – 38	54	16.9
	Total	320	100.0
Marital status	Single without dependants	186	58.1
	Single with dependents	82	25.6
	Married without dependants	18	5.6
	Married with dependants	34	10.6
	Total	320	100.0
Ethnicity	African	177	55.3
	Caucasian	52	16.3
	Coloured	31	9.7
	Indian	60	18.8
	Total	320	100.0
Education	Lower than matric	11	3.4
	Matriculated	51	15.9
	Post matriculated	45	14.1
	University	213	66.6
	Total	320	100.0

Table 2: KMO, Bartlett test and Cronbach alpha

KMO		0.743
Bartlett's Test of Sphericity	Approx Chi-Square	4054.802
	Df	630
	Sig	0.000
Cronbach alpha	36 items of the Consumer Styles Inventory	0.789

Table 2 illustrates the reliability results of the measuring tool. The results confirm that the measuring tool was valid and reliable to analyse data. For KMO and Bartlett's tests, satisfactory results exceeding 0.50 and lower than 0.05 were achieved. In addition, a satisfactory Cronbach alpha statistic of 0.789 was achieved.

Table 3: Exploratory factor analysis (EFA) Source: Musasa and Moodley (2020a; 2020b)

STATEMENT									COMMUNALITIES
Indifferent price consciousness (IPC):									
Much of my purchases are at sale prices.	0.67								0.67
I mostly prefer least least-priced clothes.	0.74								0.68
I rarely plan my purchases.	0.53								0.64
I am quick to purchase, opting for what is good enough.	0.68								0.64
I purchase items to relieve a negative mood.	0.56								0.63
I wish I could plan my purchases more carefully	0.73								0.67
High-quality fashion consciousness (HFC):									
I prioritise top-quality clothing items.		0.73							0.64
I always have high expectations in selecting my clothing items.		0.65							0.59
I prefer my clothing to be always up to date.		0.54							0.69
I prefer recent attractive styles on my clothing items.		0.45							0.50
Value consciousness (VC):									
I carefully look for value for my money clothing items.					0.71				0.59
I am careful about how much I spend on clothing items.					0.74				0.61
I prefer best buys in my clothing items.					0.72				0.65
I am careful of which clothes I purchase.					0.68				0.60
Creative variety seeking (CVC):									
It is pleasant to try new clothing items.						0.52			0.65
I buy various clothing items from a variety of stores.						0.67			0.61
It is a pleasant experience, shopping from various stores.						0.55			0.69
I shop at different stores for my clothing items						0.71			0.65
Recreational consciousness (RC):									
I enjoy shopping for clothing, just for the fun of it							0.81		0.74
Shopping for clothing items is one of the most enjoyable activities for me							0.69		0.68
Confused by over-choice (CBO):									
My choices are difficult with the more I learn about clothing.				0.71					0.61
Most clothing items have too much information that confuses me.				0.69					0.60
My decisions are hard with a wide variety of clothing brands.				0.83					0.71
It is difficult to choose a store to shop for my clothing items.				0.77					0.68
Habitual buying (HBO):									
I opt for regular clothing brands that I purchase repeatedly.			0.71						0.67
I adhere to specific clothing brands repeatedly.			0.81						0.68
If I find a clothing brand likeable, I buy it repeatedly.			0.78						0.70
I repeatedly visit the same clothing stores over time.			0.61						0.52
Shopping from the same store is important to me.			0.66						0.66
Brand consciousness (BC):									
I prefer nationally known clothing brands.								0.60	0.71
High prices are a good indication of better quality for me.								0.74	0.75
Frequently advertised clothing brands are attractive								0.63	0.73
EIGENVALUE	3.06	2.90	2.83	2.60	2.50	2.20	2.06	1.76	23.59
TOTAL VARIANCE %	8.27	7.84	7.65	7.02	6.76	5.94	5.56	4.76	63.76

As represented in Table 3, an exploratory factor analysis (EFA) was run on the original 36 items (i.e., 11-factor items) suggested by Sproles and Kendall (1986). However, this led to dropping 3-factor items and adopting 8 factors, abbreviated IPC, HFC, VC, CVC, RC, CBO,

HBO, and BC. The dropped Factor items fell short of the following thresholds: 0.50 for factor loadings, 0.50 for commonalities and 1 for eigenvalues. These factor items are decision-making styles termed impulsiveness/carelessness, perfectionism, and time-effort conserving. A total variance percentage of 63.79 was achieved and is acceptable, as illustrated in Table 3. The EFA confirmed that South African millennials are confused by over-choice, creative variety seeking, habitual, indifferent price, high quality, value, recreational, and brand conscious. This corroborates South African studies by Mafini *et al*. (2014), Potgieter *et al*. (2013), and Dlodlo and Mahao (2020).

Table 4: Multivariate tests on demographics and decision-making styles.

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	0.980	2207.200[b]	7.000	310.000	0.000
	Wilks' Lambda	0.020	2207.200[b]	7.000	310.000	0.000
	Hotelling's Trace	49.840	2207.200[b]	7.000	310.000	0.000
	Roy's Largest Root	49.840	2207.200[b]	7.000	310.000	0.000
Ethnicity	Pillai's Trace	0.580	10.687	21.000	936.000	0.000
	Wilks' Lambda	0.495	11.787	21.000	890.703	0.000
	Hotelling's Trace	0.873	12.831	21.000	926.000	0.000
	Roy's Largest Root	0.652	29.045[c]	7.000	312.000	0.000
Gender	Pillai's Trace	0.141	7.305[b]	7.000	312.000	0.000
	Wilks' Lambda	0.859	7.305[b]	7.000	312.000	0.000
	Hotelling's Trace	0.164	7.305[b]	7.000	312.000	0.000
	Roy's Largest Root	0.164	7.305[b]	7.000	312.000	0.000
Marital status	Pillai's Trace	0.281	4.607	21.000	936.000	0.000
	Wilks' Lambda	0.731	4.886	21.000	890.703	0.000
	Hotelling's Trace	0.351	5.159	21.000	926.000	0.000
	Roy's Largest Root	0.298	13.288[c]	7.000	312.000	0.000
Education	Pillai's Trace	0.105	1.621	21.000	936.000	0.038
	Wilks' Lambda	0.897	1.634	21.000	890.703	0.036
	Hotelling's Trace	0.112	1.645	21.000	926.000	0.034
	Roy's Largest Root	0.081	3.620[c]	7.000	312.000	0.001
Age	Pillai's Trace	0.206	5.130	14.000	624.000	0.000
	Wilks' Lambda	0.798	5.303[b]	14.000	622.000	0.000
	Hotelling's Trace	0.247	5.476	14.000	620.000	0.000
	Roy's Largest Root	0.222	9.882[c]	7.000	312.000	0.000

A multivariate test by MANOVA was run and illustrated in Table 4 to simultaneously test this study's hypotheses. The independent variables are demographics, and the dependent variables are the 8 decision-making styles generated by the EFA in Table 3. Using the Wilks' Lambda p-value of significance at $p<0.05$, all hypotheses (H1a, H1b, H1c, H1d, H1e) are supported. It can be inferred that consumer decision-making styles do vary with differences in age, gender, ethnic background, marital status, and education at a multivariate level. However,

post-hoc tests in Duncan's comparison of pairwise were utilised to determine the extent of differences in decision-making styles across demographics. Results are presented in Tables 5 to 9.

4.1 Decision-making styles differences with age

Table 5 displays ANOVA results, which indicate a notable divergence in consumer decision-making styles by age, except for indicators of value consciousness. Across millennial age groups, the prevailing decision-making style is high-quality fashion consciousness.

Post hoc analyses using Duncan's comparison pairwise indicate that younger millennials (18-25 and 26-34 years) are more inclined to indifferent price consciousness, creative variety seeking, recreational consciousness and confusion by over choice. In contrast, the oldest age group (35-38 years) of millennials tends to have a higher level of quality consciousness than any other age group. Habitual buying is more prevalent among the youngest and oldest cohorts than the millennials' median age group. These findings confirm hypothesis H1a.

Table 5: Mean scores and ANOVA levels of significance

Decision-making style	Age (in years)	N	Subsets		Anova sig
			1	2	
Indifferent price consciousness	35 to 38	54	2.18		
	26 to 34	51		2.68	0.00***
	18 to 25	215		2.87	
	Sig		1	0.15	
High-quality fashion consciousness	18 to 25	215	3.76		
	26 to 34	51	3.80	3.80	0.06*
	35 to 38	54		4.05	
	Sig.		0.76	0.07	
Value consciousness	26 to 34	51	3.55		
	18 to 25	215	3.65		0.68
	35 to 38	54	3.67		
	Sig.		0.40		
Creative variety seeking	26 to 34	51	3.51		
	35 to 38	54	3.60		0.56*
	18 to 25	215	3.63		
	Sig.		0.35		
Recreational consciousness	35 to 38	54	2.71		
	26 to 34	51	2.86	2.86	
	18 to 25	215		3.20	0.00***
	Sig.		0.39	0.06	
Confused by over-choice	35 to 38	54	2.50		
	26 to 34	51		2.91	
	18 to 25	215		3.15	0.00***
	Sig		1	0.08	

Habitual buying	26 to 34	51	2.71		
	18 to 25	215	2.95	2.95	
	35 to 38	54		3.06	0.07*
	Sig.		0.08	0.41	

***Significant at p=0.01, **Significant at p=0.05, *Significant at p=0.10

4.2 Decision-making styles differences with gender

Table 6 illustrates significant differences in decision-making styles, such as high-quality fashion consciousness, creative variety seeking and recreational consciousness with gender. High-quality fashion consciousness is predominant for both genders of millennial shoppers.

Follow-up tests indicate that female millennial shoppers are more high-quality conscious, creative variety seeking and recreational conscious than their male counterparts at a significance level of p=0.05. Hence, hypothesis H1b is supported.

Table 6: Mean scores and ANOVA levels of significance

	Gender Mean scores		Anova sig
Decision-making style	**Male**	**Female**	
Indifferent price consciousness	2.65	2.77	0.23
High-quality fashion consciousness	3.68	3.90	0.02**
Value consciousness	3.55	3.68	0.13
Creative variety seeking	3.31	3.78	0.0.00***
Recreational consciousness	2.65	3.31	0.00***
Confused by over-choice	2.92	3.05	0.18
Habitual buying	3.02	2.87	0.11

***Significant at p=0.01, **Significant at p=0.05, *Significant at p=0.10

4.3 Decision-making styles differences with ethnicity

ANOVA test results, as presented in Table 7, point to distinctive differences in decision-making styles between ethnicities, except for value consciousness at p=0.01. Like other demographic comparisons, high-quality fashion consciousness is the most prevalent decision-making style across all ethnic backgrounds.

Duncan's comparison pairwise tests produced noteworthy results. African millennials scored higher on indifferent price consciousness than any other ethnic group, with a mean score of 3.14. Millennial shoppers of colour (i.e., Africans, Coloured and Indians) are more inclined to creative variety seeking, recreational consciousness, and confused by over-choice than their Caucasian counterparts. Significant differences are also noted in habitual buying, with

Africans and Caucasians scoring higher than Indian and Coloured shoppers. In essence, hypothesis H1c is supported.

Table 7: Mean scores and ANOVA levels of significance

Decision-making style	Ethnicity	N	Subsets			Anova sig
			1	2	3	
Indifferent price consciousness	Caucasian	52	2.15			
	Indian	60	2.22			
	Coloured	31	2.30			0.00***
	African	177		3.14		
	Sig.		0.30	1.00		
High-quality fashion consciousness	African	177	3.57			0.00***
	Caucasian	52		3.90		
	Indian	60			4.22	
	Coloured	31			4.34	
	Sig.		1.00	1.00	0.39	
Value consciousness	Coloured	31	3.40			
	Indian	60	3.53	3.53		0.12
	African	177	3.68	3.68		
	Caucasian	52		3.75		
	Sig.		0.07	0.17		
Creative variety seeking	Caucasian	52	3.23			
	African	177		3.67		0.00***
	Indian	60		3.68		
	Coloured	31		3.71		
	Sig.		1.00	0.80		
Recreational consciousness	Caucasian	52	2.30			
	Indian	60		3.18		0.00***
	African	177		3.19		
	Coloured	31		3.40		
	Sig.		1.00	0.27		
Confused by over-choice	Caucasian	52	2.47			
	Coloured	31		3.04		0.00***
	African	177		3.10		
	Indian	60		3.15		
	Sig.		1.00	0.51		
Habitual buying	Indian	60	2.58			
	Coloured	31	2.79	2.79		
	Caucasian	52		3.01		0.00***
	African	177		3.04		
	Sig.		0.17	0.10		

***Significant at p=0.01, **Significant at p=0.05, *Significant at p=0.10

4.4 Decision-making styles differences with marital status

According to Table 8, value consciousness and habitual buying showed no significant differences with marital status at the ANOVA level, with p-values greater than 0.10. As noted in other demographic variables, high-quality fashion consciousness dominates all classes of marital status.

Subsequent tests in Duncan's comparison pairwise imply that single-headed family units are more indifferent, price-conscious, recreational-conscious and confused by over-choice than their married counterparts. Furthermore, creative variety seeking is more prevalent in single millennials without dependents than in any other family unit class. These results, therefore, substantiate hypothesis H1d.

Table 8: Mean scores and ANOVA levels of significance

Decision-making style	Marital status	N	Subsets		Anova sig
			1	2	
Indifferent price consciousness	Married with dependants	34	1.94		
	Married without dependants	18	2.04		
	Single without dependants	186		2.84	0.00***
	Single with dependents	82		2.96	
	Sig.		0.52	0.48	
High-quality fashion consciousness	Single with dependents	82	3.58		
	Single without dependants	186	3.86	3.86	0.01**
	Married without dependants	18		3.99	
	Married with dependants	34		4.09	
	Sig.		0.12	0.22	
Value consciousness	Married without dependants	18	3.56		
	Single with dependents	82	3.60		
	Single without dependants	186	3.63		0.72
	Married with dependants	34	3.76		
	Sig.		0.28		
Creative variety seeking	Married without dependants	18	3.18		
	Married with dependants	34		3.54	
	Single with dependents	82		3.59	0.05**
	Single without dependants	186		3.67	
	Sig.		1.00	0.48	
Recreational consciousness	Married with dependants	34	2.56		
	Married without dependants	18	2.64		
	Single with dependents	82		3.11	0.00***
	Single without dependants	186		3.18	
	Sig.		0.73	0.77	
Confused by over-choice	Married with dependants	34	2.47		
	Married without dependants	18	2.76	2.76	0.00***
	Single with dependents	82		2.97	

	Single without dependants	186		3.14	
	Sig.		0.12	0.06	
Habitual buying	Single without dependants	186	2.88		
	Married without dependants	18	2.93		0.62
	Married with dependants	34	2.99		
	Single with dependents	82	3.01		
	Sig.		0.51		

***Significant at p=0.01, **Significant at p=0.05, *Significant at p=0.10

4.5 Decision-making styles differences with education level

Based on Table 9, significant differences at the ANOVA level in decision-making styles and level of education are only noted in indifferent price consciousness, value consciousness and habitual buying. The dominant decision-making style is high-quality fashion consciousness across all educational levels of millennial shoppers. However, there is no significant difference between the independent and dependent variables at a p-value equal to 0.47.

Post hoc tests (Duncan's comparison pairwise) denote millennial university graduates as highly value-conscious, indifferent, price-conscious, and habitual than those who matriculated and lower. These results support hypothesis H1e.

Table 9: Mean scores and ANOVA levels of significance

Decision-making style	Education	N	Subsets		Anova sig
			1	2	
Indifferent price consciousness	Lower than matric	11	2.09		
	Post matriculated	45	2.48	2.48	0.00***
	Matriculated	51		2.59	
	University	213		2.84	
	Sig.		0.07	0.10	
High-quality fashion consciousness	University	213	3.77		
	Matriculated	51	3.88		0.47
	Post matriculated	45	3.90		
	Lower than matric	11	4.07		
	Sig.		0.20		
Value consciousness	Matriculated	51	3.39		
	Post matriculated	45	3.52		0.03**
	Lower than matric	11	3.66		
	University	213	3.72		
	Sig.		0.14		
Creative variety seeking	Matriculated	51	3.52		0.80
	Lower than matric	11	3.57		
	Post matriculated	45	3.58		
	University	213	3.63		
	Sig.		0.61		
Recreational consciousness	Post matriculated	45	2.86		

	Matriculated	51	3.06		0.52
	University	213	3.10		
	Lower than matric	11	3.23		
	Sig.		0.23		
Confused by over-choice	Lower than matric	11	2.932		
	University	213	2.957		0.52
	Post matriculated	45	3.106		
	Matriculated	51	3.118		
	Sig.		0.460		
Habitual buying	Matriculated	51	2.75		
	Lower than matric	11	2.78		0.09*
	Post matriculated	45	2.79		
	University	213	3.01		
	Sig.		0.26		

***Significant at p=0.01, **Significant at p=0.05, *Significant at p=0.10

5. CONCLUSION

This research established that millennials are indifferent to price, high-quality fashion, value, creative variety seeking, recreational conscious, and they are habitual in their shopping orientations. Furthermore, this study supported the notion that demographics induce differences in the consumer decision-making styles of millennials.

It is confirmed that younger millennial age groups are more inclined to have indifferent price consciousness, creative variety seeking, recreational consciousness, and confusion by over-choice decision-making styles than older millennial age groups. Conversely, the eldest millennial age groups are mostly more high-quality fashion-conscious than their younger counterparts. This finding is in synch with studies by Potgieter *et al*. (2013) and Abdel Wahab *et al.* (2023) from a developing country context. As such, marketers ought to revise their strategies to ensure clarity when highlighting discounts to indifferent shoppers and expanding their merchandise assortments with good deals for creative variety-seeking and recreational shoppers.

Female millennial shoppers are proven to be more high-quality conscious, creative variety seeking and recreational conscious than their male counterparts. This corroborates with extant literature. For instance, Potgieter *et al.* (2013) report high mean levels in recreational and novelty dimensions for females. Likewise, Mehta (2020) established that females are inclined to go to high-quality, recreational, and novelty shopping orientations. To attract adventurous female shoppers, a good online presence is recommended that also hypes up merchandise offerings. Shopping environments should continue to be improved to be enjoyment hubs for

feminine millennials. Once-off and speciality entertainment events are recommended in shopping malls.

The study reveals that single-headed family units are adept at being price-conscious, recreational-conscious, and confused by choice compared to their married counterparts. Precisely, single-headed family units without dependants are creative variety seeking. To the researchers' knowledge, literature linking marital status or family units with consumer decision-making styles is scarce. Marketing practitioners should audit their marketing stimuli for confusion triggers to rectify or limit information overload for these shoppers.

The findings of this study further indicate that millennial shoppers of colour are more adept at creative variety seeking, recreational consciousness, and are confused by choice than their Caucasian counterparts. This corroborates studies by Potgieter *et al.* (2013) on African shoppers being more recreational and novel in shopping, ethnical differences in decision-making styles noted by Radder *et al*. (2006), as well as differences reported by Dlodlo and Mahao (2020). Retailers are encouraged to improve store aesthetics to cater for the recreational needs of millennial shoppers of colour. Store lighting should capture the mood of shoppers, and a sense of comfort when shopping should be reinforced by aisle hygiene, appealing visuals, and clear signage should enhance shopper traffic in-store.

This research study ascertained that South African millennials with a university qualification are highly indifferent price-conscious, habitual and value-conscious than other cohorts at different educational levels. This supplements a South African perspective by Potgieter *et al.* (2013) that found no significant differences in education on consumer decision-making styles at the multivariate level. For this cohort, marketers should aim to reinforce value messages through credible brand images, product bundling deals, product trials and leveraging on product quality versus price relationship.

5.1 Implications to practitioners (Managerial implications)

This study contributes to millennials' consumer behaviour literature by empirically testing the demographic-induced differences in consumer decision-making styles. It follows growing calls for introspection on a nascent millennial market that is rapidly becoming the backbone of most economies. It also observes the need for non-student samples and non-Western perspectives on consumer decision-making styles.

There is scant literature on demographic-induced differences in consumer decision-making styles from developing economies, although insights into these issues provide a foundation for effective marketing strategies. The study, therefore, bridges the gap in the literature on demographic-induced differences in the consumer decision-making styles of millennials. It is

believed that insights into this nascent market would lead to effective segmentation, targeting and execution of the marketing mix. Marketers can effectively segment, target, and execute their marketing strategies by taking note of demographic-specific shopper behaviour. Demographic-specific shopper behaviour demands a customised marketing mix.

For demographics adept to indifferent price consciousness (i.e. young millennials, single-headed families, and highly educated millennials), marketers ought to tailor their marketing mix's price and promotion dimensions. These should amplify discounts, loyalty rewards, and cost-effectiveness for this cohort. This cohort is believed to be responsive to price bundling, price matching and other promotions.

For the recreational demographic groups (i.e. young millennials, female millennials, single-headed families, and millennials of colour), marketers should strive to provide shopping environments that are engaging and enjoyable. The product dimension of the marketing mix can be customised to widen and deepen merchandise offerings to cater to this demographic cohort. Furthermore, promotional campaigns should become more interactive and personalised for this cohort. For example, testimonials and influencer endorsements appeal to this millennial cohort. Online shopping environments should be gamified, personalised to provide recommendations, and be immersive for customers.

Confused by over-choice demographic groups, such as young millennials, single-headed families, and millennials of colour, are significant to marketers. This cohort requires marketers to simplify the decision-making process. This can be achieved through better categorisation of merchandise, limiting merchandise options that are better curated, and implementing aids such as customer reviews, endorsements, artificial intelligent recommendations and ranking in online shopping environments.

Lastly, the creative variety-conscious demographic cohorts (such as young millennials, female millennials, and millennials of colour) seek constant changes and new market offerings. Marketers may introduce limited editions of offerings, tailor offerings, and provide product lines that demonstrate innovation. For example, in the marketing of beverages, there are customised flavours and seasonal packaging. Similarly, there are limited editions or anniversary celebration car models in the marketing of automobiles.

5.2 Implications to consumers

Besides business implications, this study also assists consumers in understanding their shopping orientations and their possible antecedents. Such personal knowledge may lead to improved decision-making, for instance, those who experience confusion due to over-choice and how they can alleviate confusion or cognitive dissonance. The confused-by-over-choice

demographic cohort will be aware of cognitive aids such as testimonials and reviews from experts and focus on limited product ranges.

Indifferent price consumers will acknowledge that price savings and apathetic shopping influence their shopping orientation. They also become aware of the trade-off between excessive focus on saving and product quality. Moreover, they become alert when decision fatigue sets in comparison shopping for value.

Recreation-conscious and creative variety-seeking cohorts will become aware of their appetite for exploration in shopping, which may increase their expenditure and sustain brand loyalty.

5.3 Implications to policymakers

Knowledge of demographic-based consumer decision-making styles enhances policy-making. Based on this study's findings, policymakers are to advocate for laws that promote price transparency, price comparison and access to price information for the price-conscious millennial groups. Alternately, laws that deter price deception and negative pricing strategies (fixing, predatory pricing) will be promoted. Policymakers can promote comparison sites (aggregators, review sites) in online shopping platforms.

To protect adventurous millennial shopping styles such as recreation and creative variety seeking, policymakers need measures that foster sustainable consumption and financial literacy and reduce manipulation in marketing.

Lastly, the confusion of the over-choice cohort needs protection from policymakers. Product labelling should be standardised to highlight key nutrition issues, environmental impact and cost. Such labelling standards should make it easy for consumers to compare products.

5.4 Study limitations and Direction for future studies

This study utilised a non-probability convenience sample which limits representation of the population studied. It recommended that generalisation of findings be performed with caution.

This investigation focused on clothing items as a reference in determining decision-making styles and the differences in demographics. Future studies should explore other product or service categories to enhance knowledge in shopping orientations. Buying styles evolve with time, retail development, developed and developing contexts, and culture (Mehta & Dixit, 2016). Future studies should continue to explore the buying styles of current generations (i.e., Generation Z), buying styles in virtual or online contexts, and developed and developing economies. Studies on structural modelling of demographics or other antecedents and consumer decision-making styles are also recommended for the future.

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https://www.academia.edu/download/114276201/MUSASA_20T_2020.pdf

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