SPIRAL CONSUMPTION AND CONSUMER SUSTAINABILITY OF ACADEMIC STAFF IN UNIVERSITY OF PORT HARCOURT

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ABSTRACT

This study examined the relationship between spiral consumption and consumer sustainability. Spiral consumption was decomposed into repetitive consumption and acquisitive consumption; while consumer sustainability was proxied by consumer attitude and aspirational consumption. Academic Staff in University of Port Harcourt constituted the population of the study. 353 respondents were arrived at, using cluster sampling technique. A cross sectional survey design was adopted in the study. To test the hypotheses, Pearson Product Moment Correlation and partial correlation were adopted. The results showed that a positive relationship exists between dimensions of spiral consumption and measures of consumer sustainability. The study therefore concludes that spiral consumption significantly relate to consumer sustainability; and recommends that consumers should watch their consuming attitude and know when to spend and how to spend.
Keywords: Spiral consumption, consumer sustainability, repetitive consumption, aspirational consumption, acquisitive consumption, consumer attitude, naira redesign

INTRODUCTION

The last few decades have witnessed dynamic change across the world, with millions of people lifted out of poverty and a number of countries reaching middle income status. However, these transformations have come at a significant cost to the business world. Increasing demand for energy, food, water and other resources have resulted in consumption limits. With humans now consuming more resources than ever before, the current patterns of development across the world is not sustainable. One of the key elements for achieving sustainable development is the transition towards sustainable production and consumption. People consume all that they have without a consideration of posterity.

Consumers must engage sustainable consumption habit. Sustainable consumption and production is about fulfilling the needs of all while using fewer resources. It can contribute to poverty alleviation and transition toward low consumption level; which is essential to improving the lives of the world's poorest people, who depend on consuming all. This leads us to the concept of spiral consumption.

Spiral consumption lead to improved quality of life and greater employment opportunities, and complement poverty reduction strategies. Change in behaviour may be required due to unhealthy buying behavior, need to reduce disease, and improve the quality of life of a society (Manzano et al., 2012). Consumer behaviour change has been the subject of research in different fields of learning, and has been approached in several different ways.

Spiral consumption describes the purchase of new things to replace old ones, even if that means emptying the bank account. Imagine buying a new shirt, but without considering to buy a new jacket. You were perfectly happy with the old jacket until you wore it with the new shirt. However, you imagine that the new shirt makes the old jacket look worn. So you buy a new jacket. You may then feel the need to buy new trousers, and perhaps new shoes. Before you realize it, you have a whole new wardrobe. This is associated with the theory of Diderot Effect.

The Diderot Effect is often cited among reasons people overspend, and it is not hard to see why: a single item can trigger a string of purchases that could make the 'new you' someone who has to take up a few night time shifts in addition to your regular job. The term Diderot Effect was coined by Grant McCracken in 1988 and explained that people's purchases do not depend solely on an item's functionality or practicality, but also on what is known locally as AKPIRI-OGOLOGO (longer throat).

The traditional belief that people make purely rational decisions would assume they would only replace or upgrade something once it no longer worked. However, McCracken said that purchases are tied more closely to a person's identity than to pure practicality. From economic well-being perspective, over-consumption is often associated with over-spending, resulting in financial stress (Schor, 1999).

The aim of this study is to empirically investigate the relationship between spiral consumption and consumer sustainability. The specific objectives are to:
1) Determine the effect of repetitive consumption on consumer sustainability.
2) Ascertain the impact of aspirational consumption on consumer sustainability.
3) Investigate the moderating effect of naira redesign on the relationship between spiral consumption and sustainability.

LITERATURE REVIEW

Theoretical Framework
Diderot effect theory underpinned this paper. Diderot effect states that obtaining a new possession often creates a spiral of consumption which leads one to acquire new things. As a result, we end up buying things that our previous selves never needed to feel happy or fulfilled. This is an idea that companies have been playing with for a long time in an attempt to convince people to buy not just one product, but a whole series of them.

An example of Diderot effect is a situation where an individual buys a new sofa, and then, buys new TV furniture and coffee table to match. Or, an individual buys a new car and ends up buying all sorts of additional things to complement or augment it. Such as buying a tire pressure gauge, a car charger for cell phone, an extra umbrella, a first aid kit, a pocket knife, a flashlight, emergency blankets, and even a seatbelt cutting tool.

The Diderot Effect suggests that life more things fight to get into ones' life. So, one has to understand how to curate, eliminate, and focus on the things that matter. **Reduce exposure.** Every habit is initiated by a trigger. One of the quickest ways to reduce the power of the Diderot Effect is to avoid habit triggers. **Buy items that fit your current system.** You do not have to start from scratch each time you buy something new. When you purchase new clothes, look for items that work well with your current

wardrobe. When you upgrade to new electronics, get things that play nicely with your current pieces so you can avoid buying new chargers, adapters, or cables.

The Diderot Effect tells us two things about ourselves: (1) we buy goods that complement each other and build towards a unified image we have of our own identity; and (2), if we obtain an item that does not fit that identity, we will be tempted to either disregard it or make it the centre piece of our new identity. This means we care about buying things, which in our opinion work together, and that we believe fit with who we are.

Concept of Spiral Consumption
In business, and particularly in marketing, consumption has generally been treated as a proxy for market demand, and more of it has been seen as being always better for business. Hence, high or overconsumption as a potential "problem" has received very limited attention from business and marketing researchers. When attention is given to consumption as a problem, the concern has been mostly about environmental sustainability, and there too, the cause has been perceived to be not the level or scale of consumption, but the nature of what is used or consumed. Implicit in this view of consumption is the assumption that consumption of more eco-friendly products, can neutralize the negative impact of any extent of increase in consumption. Thus far, business has shown inadequate appreciation of the problem of overconsumption (Hansen & Schrader, 1997).

Spiral consumption describes the scenario of buying something new and when the new item is purchased, it triggers replacing old possessions with items that match the new one. Under-consumption and overconsumption are both critical problems (Seyfang, 2009; Worldwatch Institute, 2010). Under-consumption is a problem for vast segments of humanity at the "bottom of the pyramid" (BoP), constituting up to nearly two-thirds of the world population by many estimates. In the past, BoP was an unserved market, now it is receiving increasing attention from businesses as an under-tapped opportunity for growth (Viswanathan et al., 2009).

Poverty levels around the world is declining steadily even if slowly, and as people are coming out of poverty, their consumption level is increasing. In contrast to under-consumption, over-consumption is surfacing as the spiral consumption problem in the "prime" markets, that is, mainstream middle and higher-income markets representing consumers around the world with substantial disposable income for discretionary spending. The most basic form of excessive consumption involves acquiring things at a scale that exceeds one's needs, or even one's capacity to consume.

Consumer Sustainability
The concept of sustainability challenge a society to meet its economic and social needs without causing damage to the environment, which is the antithesis of consumerism, identified by Hume as 'the effects of gathering and purchasing material possessions to increase happiness and social position'(Hume, 2010). Sustainability refers to business strategies in which firms integrate sustainability activities into their operational and strategic goals (Tiago et al., 2021).

Sustainability and its assessment in organisations is becoming an essential component of corporate performance management (Saeed & Kersten, 2017). In analyzing the reasons for slow sustainability development, it is important to mention that there is still a doubtful understanding of the fundamentals of sustainability and an unknown return on investment for not only organizations, but also to the society (Naude, 2011).

Consumers who have knowledge about sustainability and sustainable products with positive past experiences have a high tendency to acquire strong intentions to continue purchasing sustainable products due to the positive impact of the environment (Norazah, 2013). Hill and Lee (2012) argue that only a few

studies have investigated the area of young consumers' knowledge of sustainability. The findings from these studies indicates that sustainability is not a distinct concept to consumers, and that knowledge gaps in terms of the understanding of sustainability exists (Carew & Mitchell, 2002; Kagawa, 2007). Hanss and Böhm (2012) hold that environmental, social and economic dimensions of sustainability are particularly important to consumers´ understanding of sustainability.

Consumer Attitude
The concept of consumer attitudes is multi-dimensional and several scholars have conceptualize the construct in several ways with varying definitions. Kotler and Keller (2007) define consumer attitude as a predisposition to consistent response to marketing stimuli based on experience. An attitude is an individual's enduring favourable or unfavourable emotional feeling, evaluation and action tendencies. Evans et al. (2006) view attitude as an enduring organization of motivational, perceptual, and cognitive process with respect to some aspects of consumer's world. They further assert that attitude is an outcome of learning and is influenced by trust, familiarity, and perceived economic situation.

Steiner (2004) conceptualization of consumer attitude drew great emphasis on positive or negative experience of service offerings which may result to favourable or infavourable attitude towards a brand. Further, negative experience is usually easy to share with other people (prospective customers) and thereafter influences their purchase decision. Beneke (2008) expressed that consumers' purchase experience involves both intrinsic and extrinsic outcomes which in-turn plays an essential role to determining further purchase actions.

The intrinsic memory comes from the real experience consumers have with the products, while extrinsic memory emanates from information related to the products. However, the overall experience of purchasing stays and will remain in and forms the consumer's attitude (Beneke, 2008). It is therefore pertinent to add that consumers with plenty of purchase experiences are those with strong attitude either favourable or unfavourable towards service offerings.

Acquisitive Consumption
The most basic form of excessive consumption involves acquiring things at a scale that exceeds one's needs, or even one's capacity to consume. Mooallem (2009) offered that by 2005, the average world consumer purchased one new piece of clothing every five and a half days. Previously, she has noted that the culture of consumerism has led to the doubling of consumption of goods between the 1950s and 1990s (Schor, 1992). One very revealing indicator of excessive acquisition behaviour is the problem of storage faced by American families. Arnold and Lang (2007) point out that for most middle-class families the storage of goods has become an overwhelming burden. They also note an exponential growth in the number of professional organizers who provide service to families for coping with their possessions. Another related development is the rapid expansion of self-storage facilities.

Spiral Consumption and Consumer Sustainability
Spiral consumption is premised on consciousness in thought and behaviour about consequences of consumption. It also assumes that one is in a position to choose what and how much to consumes. This means that one is not forced or limited by one's circumstances or market conditions to consume in a certain way, e.g., being forced to curtail consumption; rather, the consumer makes a conscious choice about consumption according to their values and preference. To that extent, the mindset guides and shapes the behaviour in consuming sustainably.

In spiral consumption, both mindset and behaviour are characterized by a core attribute. For mindset it is a sense of caring about the implications and consequences of one's consumption; and for behaviour, the core attribute is temperance in consumption. Further, there are three realms in which mindset is infused

with a sense of caring, and three types of behaviour in which temperance is needed. For behaviour change, temperance is the central theme.

Temperance does not imply a rejection of consumption per se, it is aimed at making consumption optimal for one's well-being and consistent with one's values (Mont, 2004). Research shows that a "new frugality" has become the dominant mindset among American consumers, and this frugality is a fundamental shift in consumer behavior that is reshaping consumption patterns in a lasting way (Egol et al., 2010). "Frugal spending habits" is one of the top changes with the greatest staying power adopted by American consumers (Schwab Advisor Services, 2010).

Research also indicate a more cautious attitude toward spending: over 80% of those making $90,000 or more a year say they are watching their spending, and 63% say they are cutting back on their spending; the percentages are somewhat higher among middle- and lower-income Americans doing the same (Newport & Jacobe, 2009). The Economist (2009) also reports trends pointing to a profound shift in consumer psychology toward thrift, and notes that "Now many people no longer seem consumed by the desire to consume; instead, they are planning to live within their means."

Repetitive Consumption and Consumer Sustainability

The cycle of buying, discarding, and buying again is another path to excessive consumption. Many things are discarded and purchased repeatedly, because they are meant to be disposable (McCollough, 2007). Disposable products have been around for a long time—paper napkins and towels, plastic and utensils, disposable razors, lighters and diapers. The main appeal of such products is their convenience and time savings, as well as low upfront costs. More recent entries in this category include disposable cameras, watches and umbrellas, and above all, the disposable plastic water bottles, arguably one of the biggest new source of harmful waste around the world (Gleick & Cooley, 2009).

In another variation of repetitive consumption, with more serious sustainability implications, products are discarded because of their obsolescence (McCollough, 2009). Psychological obsolescence is a common cause of repetitive consumption in items such as apparel, appliances, cars, cell phones, and many fashion or luxury goods. From a sustainability perspective, the problem is that more often than not, people discard functionally sound products for replacements that offer either only cosmetic changes, or some minor feature-performance improvements. This is what Heiskanen (1996) calls "discretionary replacement," in which consumers do not seem to be guided by rational cost-benefit considerations relating to product functionality. Based on this backdrop, the following hypotheses are formulated:

H_1: There is no significant relationship between repetitive consumption and consumer attitude.
H_2: There is no significant relationship between repetitive consumption and acquisitive consumption.

Aspirational Consumption and Consumer Sustainability

The most widely and easily recognized form of excessive consumption is associated with the idea of conspicuous consumption (Veblen, 1899) which common among the superrich, and driven by competition. Now, competitive consumption is often seen in a related, but more subtle variation of aspiration-driven consumption, and it is no longer limited to those at the top of the income pyramid.

Similarly, Frank (1999), showed that the super-rich spend multi-million dollars on vacation homes wrist watches, professional grills, and alligator shoes. However, the spending of the super-rich is still a small part of the total consumer spending; the real significance of their spending lies in the impact they have made as the shapers of pervasive changes in the spending habits of the middle- and even low-income families.

Aspirational consumption finds expression in trading up - for instance in bigger and more luxurious cars; "professional" home electronics and appliances; designer apparel and shoes; move-up in housing; and in a variety of other luxury expenditures (vacation homes, hobbies) (De Graaf et al., 2005). For consumption to be sustainable, consumer behavior in all three of these areas has to undergo a shift toward spiral consumption. A caring mindset impels this shift, and also makes the shift gratifying for the consumer.

We summarize the idea of spiral consumption in the following definition: Spiral consumption connotes temperance in acquisitive, repetitive and aspirational consumption at the behavior level, ensuing from and reinforced by a mindset that reflects a sense of caring toward self, community, and nature. Based on this backdrop, the following hypotheses are formulated:

H_3: There is no significant relationship between aspirational consumption and consumer attitude.

H_4: There is no significant relationship between aspirational consumption and acquisitive consumption.

Naira Re-Design
The central bank of Nigeria (CBN) on 26th October 2022 alongside the federal government announced that by the 31st of January 2023, the 1000-, 500- and 200-naira notes will cease to be legal tender in the country as the central bank of Nigeria has redesigned new currencies of these notes to replace the old ones. Some Nigerians welcomed the idea with enthusiasm of having a new currency while others saw it as unnecessary and a misplaced priority by the government of the country.

Although the central bank of Nigeria gave reasons for the change of currency, among this was to check counterfeiting, to restrain inflation and to mop up currency that is outside the banking system (Oxford Analytica, 2022). The Nigerian public believed that other reasons for the withdrawal of the old currency was the notion that some politicians may have hoarded these currency denominations for vote buying in the country's 2023 general elections. This is of course one of the impacts the redesigned notes were to make as Oxford Analytica report (2022) revealed.

As Salau (2023) observed, the new naira notes were in short supply as commercial banks did not have enough of the notes which made it to be in limited circulation. Following the expiration of the 31st January 2023 deadline, banks were seen to be helpless as the automatic teller machines (ATM) were not dispensing the new currency and Nigerians were having difficulties accessing same from the banks. Meanwhile, as the currency redesign policy continued to bite harder on the citizens of Nigeria, operators of point of sale (POS) services seized the opportunity to maximize gains as charges went above 400 percent in many cities of the country (Mojeed & Izuaka, 2023).

Nigerians were thrown into dilemma, as they had no choices than to pay such exorbitant charges to get the new notes. Although there are other means of transaction such as the electronic transfers and point of sale, it is pertinent to point that many Nigerians do not have access to smart phones and for those who do, the poor nature of internet connections in the country has made many electronic transactions unsuccessful. Based on this assertion, this hypothesis is formulated:

H_5: Naira re-design do not significantly influence the relationship between spiral consumer and consumer sustainability.
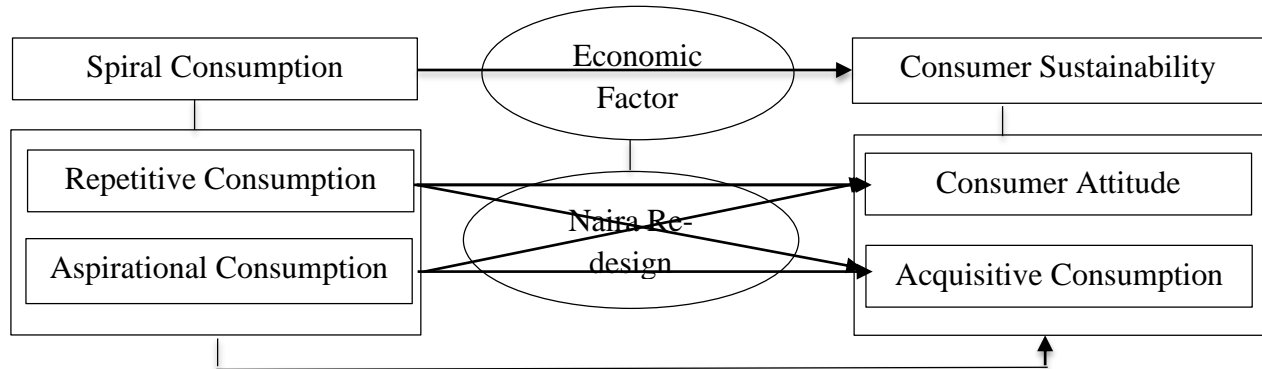
Fig. 1: Conceptual operational framework on spiral consumption and consumer sustainability
Source: Adapted from Egol et al. (2010); Saeed and Kersten (2017); De Graaf et al. (2005).

METHODOLOGY

This study aim is to empirically investigate the relationship between spiral consumption and consumer sustainability attitude. A cross sectional survey design of quasi experimental research design was adopted, this is because a snap shot of event data are to be collected, same analyzed through statistical tools for inference purpose. It is also suitable since the study involved human behavior and is not subjected to laboratory strict control. Data was collected from academic staff of University of Port Harcourt. This led the study to adopt cluster probability sampling. Cluster probability sampling is useful for reducing sampling costs and dealing with the lack of a satisfactory sampling frame. 3000 academic staff of University of Port Harcourt and Taro Yamen's formula was used to get the sample size, therefore we have three hundred and twenty five (325) lecturers.

Therefore 353 was our sample size. Well-constructed copies of questionnaire were administered on respondents. The instrument adopted was a five-point Likert scale which includes: SA=Strongly Agree (5), Agree=A (4), Undecided=U (3), D=Disagree (2), Strongly Disagree=SD (1). The reported Cronbach's alphas are as follows: repetitive consumption (0.75), aspirational consumption (0.78), consumer attitude (0.71), acquisitive consumption (0.77) and naira re-design (0.82). The coefficient values were all above 0.7. Pearson product moment correlation and partial correlation significant were used to test the formulated hypotheses.

RESULTS AND DISCUSSIONS

Table 1: Respondents Questionnaire and Demographics Distribution

Details	Particulars	Frequency	Percentage (%)
Gender	Male	210	86
	Females	35	14
	Total	**245**	**100**
Age group	25 - 35 years	9	4
	36-45 years	75	31
	46-55 years	83	34
	56-65 years	54	22
	66 years and above	24	10
	Total	**245**	**100**
Academic qualification	B.Sc	15	6
	M.Sc/MBA	74	30
	PhD	156	64
	Total	**245**	**100**

Source: Survey data, 2023

Table 1 shows the questionnaire and demographics distribution of the respondent; out of 325 questionnaire administered, 269 copies of questionnaire were retrieved with a percentage of 83% of the total questionnaire distributed while 56 questionnaire with a percentage of 17% were not retrieved. Out of the 269 returned questionnaire 245 were usable representing 91% while 24 of the returned questionnaire with a percentage of 9% were not relevant for the study.

For gender distribution; 210 of the respondents with a percentage of 86% were male respondents, 35 of the respondents with a percentage of 14% were females. For age group distribution; 9 respondents fall within the age grade of 25 - 35 years with a percentage of 4% of the total respondents, 31% corresponding to 75 respondents of the total respondents fall in the age group of 36-45 years, 83 respondents with a percentage of 34% fall in the age group of 46-55 years, 54 respondents with a percentage of 22% fall in the age group of 56-65 years, while 24 respondents with a percentage of 9% fall in the age group of 66 years and above.

Table 2: Correlation between Repetitive Consumption and Consumer Attitude

Correlations

		Repetitive Consumption	Consumer Attitude	Acquisitive Consumption
Repetitive Consumption	Pearson Correlation	1	.929**	.889**
	Sig. (2-tailed)		.000	.000
	N	245	245	245
Consumer Attitude	Pearson Correlation	.929**	1	.763**
	Sig. (2-tailed)	.000		.000
	N	245	245	245
Acquisitive Consumption	Pearson Correlation	.889	.763	1
	Sig. (2-tailed)	.000	.000	
	N	245	245	245

**. Correlation is significant at the 0.05 level (2-tailed).

Table 2 shows a Pearson Product Moment Correlation Coefficient of 0.929 and a probability value of 0.000. This result indicates that there is a strong, positive and statistically significant relationship between repetitive consumption and consumer attitude. The coefficient of determination ($r^2 = 0.86$) indicated that 86% of consumer attitude is explained by repetitive consumption. This implies that 86% of respondents agreed that spiral consumption significantly determine consumer attitude.

Table 2 also shows a Pearson Product Moment correlation coefficient of 0.899 and a probability value of 0.000. This result indicates a strong, positive and statistically significant relationship between repetitive consumption and acquisitive consumption. The coefficient of determination ($r^2 = 0.808$) indicates that 80.8% of acquisitive consumption is explained by repetitive consumption. Therefore, we reject the null hypothesis and accept the alternate hypothesis.

Table 3: Correlation between Aspirational Consumption and Consumer Attitude

Correlations

		Aspirational Consumption	Consumer Attitude	Acquisitive Consumption
Aspirational Consumption	Pearson Correlation	1	.865**	.804**
	Sig. (2-tailed)		.000	.000
	N	245	245	245
Consumer Attitude	Pearson Correlation	.865**	1	.763**
	Sig. (2-tailed)	.000		.000
	N	245	245	245
Acquisitive Consumption	Pearson Correlation	.804	.763	1
	Sig. (2-tailed)	.000	.000	
	N	245	245	245

**. Correlation is significant at the 0.05 level (2-tailed).

Table 3 shows a Pearson Product Moment correlation coefficient of 0.865 and a probability value of 0.000. This result indicates that there is a strong and positive significant relationship between aspirational consumption and consumer attitude. The coefficient of determination ($r^2 = 0.748$) indicate that 74.8% of consumer attitude is explained by aspirational consumption. This implies that 74.8% of the respondents agreed that spiral consumption significantly determines the consumer attitude.

Table 3 also shows a Pearson Product Moment correlation coefficient of ($r = 0.804$) and a probability value of 0.000. This result indicates that there is a strong and positive significant relationship between aspirational consumption and acquisitive consumption. The coefficient of determination ($r^2 = 0.646$) indicated that 64.6% of acquisitive consumption is explained by aspirational consumption. Therefore, we reject the null hypothesis and accept the alternate hypothesis, because the PV (0.000) <0.05 level of significance.

Table 4: Impact of Naira Re-design on Relationship between Spiral Consumption and Consumer Sustainability

Correlations				
Control Variables			Spiral Consumption	Consumer Sustainability
Naira Re-Design	Spiral Consumption	Correlation	1.000	.884.
		Significance (2-tailed)	.	.010.
		Df	0	242
	Consumer Sustainability	Correlation	884.	1.000
		Significance (2-tailed)	.010.	.
		Df	242	0

*. Correlation is significant at the 0.05 level (2-tailed).
Source: Field Survey Data, 2023, SPSS 21 Output

Table 4.4 above reveals a partial correlation coefficient of 0.884 and probability value of 0.010 (**PV< 0.05**). This result indicates that naira re-design has is a very strong positive significant relationship between spiral consumption and consumer sustainability of academic staff of university of Port Harcourt. Therefore, we reject the null hypothesis and accept the alternate.

DISCUSSION OF FINDINGS

Repetitive Consumption and Consumer Sustainability
The results supported all the two hypotheses formulated for the study. The test of hypothesis one shows that repetitive consumption was positively related to consumer attitude. A Pearson Product Moment Correlation Coefficient of (r = 0.929) and a probability value of 0.000. This result indicates that there is a strong and positive significant relationship between repetitive consumption and consumer attitude. The coefficient of determination (r² = 0.86) indicated that 86% of consumer attitude is explained by repetitive consumption.

The test of hypothesis two shows that repetitive consumption was positive related to acquisitive consumption. It also shows a Pearson Product Moment correlation coefficient of (r = 0.899) and a probability value of 0.000. This result indicates that there is a strong and positive significant relationship between repetitive consumption and acquisitive consumption. The coefficient of determination (r² = 0.808) indicated that 80.8% of acquisitive consumption is explained by repetitive consumption. This finding is consistent with previous studies that found that repetitive consumption boosts belief by tantalizing customers to have positive attitude toward spiral consumption (Gleick & Cooley, 2009; Cooper, 2004; McCollough, 2009; Slade, 2006).

Aspirational Consumption and Consumer Sustainability
The results supported all the two hypotheses formulated for the study. The test of hypothesis three shows that aspirational consumption was positive related to consumer attitude. A Pearson Product Moment correlation coefficient of (r = 0.865) and a probability value of 0.000. This result indicates that there is a strong and positive significant relationship between aspirational consumption and consumer attitude. The coefficient of determination (r² = 0.748) indicated that 74.8% of consumer attitude is explained by aspirational consumption.

The test of hypothesis four shows that aspirational consumption was positive related to acquisitive consumption. It also shows a Pearson Product Moment correlation coefficient of (r = 0.804) and a probability value of 0.000. This result indicates that there is a strong and positive significant relationship between aspirational consumption and acquisitive consumption. The coefficient of determination (r² = 0.646) indicated that 64.6% of acquisitive consumption is explained by aspirational consumption. This finding is consistent with previous studies that found that a good aspirational consumption boosts belief by tantalizing customers to have positive attitude toward spiral consumption (Egol et al., 2010; Schwab Advisor Services, 2010; Newport & Jacobe, 2009; The Economist, 2009; Hamm, 2008) reports that people who previously over-consumed are now rejecting extravagant lifestyles, and they are spending less, and more wisely.

Impact of Naira re-design on nexus between spiral consumption and consumer sustainability
Hypothesis five postulated the extent of the influence of naira redesign on the relationship between spiral consumption and consumer sustainability of academic staff of university of Port Harcourt. The hypothesis sought to examine the moderating influence of naira redesign on the nexus between spiral consumption and consumer sustainability of academic staff of university of Port Harcourt. Hence, our analysis revealed that naira redesign influences the relationship between spiral consumption and consumer sustainability of academic staff of university of Port Harcourt. This findings is in line with the study of Salau (2023) that naira redesign has a significant impact of consumer consumption behaviour. Also, Mojeed and Izuaka (2023) found that naira redesign significantly influence consumer attitude on consumption.

CONCLUSION AND RECOMMENDATIONS

This study sought to examine relationship between spiral consumption and consumer sustainability. Based on the results obtained from the empirical analyses conducted, the study concludes that spiral consumption (repetitive consumption and aspirational consumption) has significant relationship with consumer sustainability (consumer attitude and acquisitive consumption); and that Naira redesign impact the relationship between spiral consumption and consumer sustainability. The study therefore recommends as follows:

1) Consumers should watch their consuming attitude towards repetitive consumption, as such would lead to poverty level.
2) Consumers should know when to spend, consume and how to spend and consume. This has affected many consumers because of their inability to control spending spree when there is resources to spend.
3) Orientation on spiral consumption and consumer sustainability should be provided to citizens of a country by government and non-governmental organizations. With this, the understanding of spending spree and spiral consumption will be managed extensively.
4) The central bank of Nigeria needs to constantly provide the Nigerian citizens with information regarding the monetary policy and how to negotiate cash access.

REFERENCES

Arnold, Y., & Lang, J. (2007). *The coming of age: China's new class of wealthy consumers.* McKinsey and Co.

Beneke, J. (2008). Consumer perception of private label brands within the retail grocery sector of South Africa. *Journal of Business Management*, *4*(2), 203-220.

Carew, A. L., & Mitchell, C. A. (2002). Characterizing undergraduate engineering students' understanding of sustainability. *European Journal of Engineering Education*, 27(4), 349-61.

Cooper, T. (2004). Inadequate life? Evidence of consumer attitudes to product obsolescence. *Journal of Consumer Policy, 27,* 421–449.

De Graaf, J., Wann, D., & Naylor, T. H. (2005). *Affluenza: The all-consuming epidemic.* Berrett-Koehler.

Economist (2009). From buy, buy to bye-bye. *The Economist,* (April), 67–68.

Egol, M., Clyde, A., Rangan, K. & Sanderson, R. (2010). *The new consumer frugality: Adapting to the enduring shift in U. S. consumer spending and behavior.* Booz & Company.

Evans, M., Jamal, A., & Foxall, G. (2006). Consumer behavior. John Wiley & Sons.

Frank, R. H. (1999). *Luxury fever: Why money fails to satisfy in an era of excess.* Free.

Gleick, P. H., & Cooley, H. S. (2009). Energy implications of bottled water. *Environmental Research Letters,* 4-6.

Hamm, S. (2008). The new age of frugality. *Business Week,* (October, 20), 55–58.

Hansen, U., & Schrader, U. (1997). A modern model of consumption for a sustainable society. *Journal of Consumer Policy, 20,* 443–468.

Hanss, D., & Böhm, G. (2012). Sustainability seen from the perspective of consumers, *International Journal of Consumer Studies*, *36*(6).

Heiskanen, E. (1996). *Conditions for product life extension*. National Consumer Research Centre. Working Paper 23.

Hill, J., & Lee, H. (2012). Young generation Y consumers' perceptions of sustainability in the apparel industry, *Journal of Fashion Marketing and Management*, *16*(4).

Hume, M. (2010). Compassion without action: Examining the young consumers' consumption and attitude to sustainable consumption. *Journal of World Business 45*, 385-394

Kagawa, F. (2007). Dissonance in students' perceptions of sustainable development and sustainability: Implications for curriculum change. *International Journal of Sustainability in Higher Education*, *8*(3).

Kotler, P., & Keller, K. (2007). *Marketing management*. Pearson Education.

Manzano, N., Rivas, L. & Bonilla, G. (2012). Explanatory models of change of consumer behavior applied to social marketing. *iBusiness, 4*(3), 246-255.

McCollough, J. (2007). The effect of income growth on the mix of purchases between disposable goods and reusable goods. *International Journal of Consumer Studies, 31,* 213–219.

Mojeed, M., & Izuaka, M. (2023). Naira Redesign: Nigerians grapple with hardship as PoS transaction charges jump 400%. *Premium Times*. Retrieved from https://www.premiumtimesng.com/news/headlines/580177-naira-redesign-nigerians-grapple-with-hardship-as-pos-transaction-charges-jump-400.html

Mont, O. (2004). Institutionalization of sustainable consumption patterns based on shared use. *Ecological Economics, 50,* 135–153.

Mooallem, J. (2009). *The self-storage self.* The New York Times Magazine (September 6),. MM-24+.

Naude, M. (2011). Sustainable development in companies: Theoretical dream or implementable reality? *Corporate Ownership & Control, 8*(43), 352–364.

Newport, F., & Jacobe, D. (2009). *Consumers adjust attitudes toward spending.* http://www.gallup.com/poll/122648/consumers-adjustattitudes-toward-spending.aspx

Norazah, M. S. (2013). Green products purchases: structural relationships of consumer perception of eco-label, eco-brand and environmental advertisement. *Journal of Sustainability Science and Management, 8*(1), 1–10.

Oxford Analytica, (2022). New Nigeria banknotes may have mixed results: Expert Briefings. Retrieved from http://doi.org/10.1108/OXAN-DB274721

Saeed, M. A., & Kersten, W. (2017). Supply chain sustainability performance indicators: A content analysis based on published standards and guidelines. *Logistics Research, 10*(12), 1–19.

Salau, S. (2023). *Businesses suffer as struggle for new naira notes lingers*. Retrieved from https://guardian.ng/features/businesses-suffer-as-struggle-for-new-naira-notes-lingers/

Schor, J. B. (1992). *The overworked American: The unexpected decline of leisure.* Basic Books.

Schor, J. B. (1999). *The overspent American: Why we want what we don't need*. Harper Perennial.

Schwab Advisor Services. (2010). *Independent advisor outlook study.* Charles Schwab & Co., Inc.

Seyfang, G. (2009). *The new economics of sustainable consumption.* Palgrave Macmillan.

Slade, G. (2006). *Made to break: Technology and obsolescence in America.* Harvard University Press.

Steiner, R. (2004). The nature and benefit of national brand/ private label competition. *Review of Industrial Organization*, *24*(2), 105-127.

Strasser, S. (1999). *Waste and want.* Henry Holt

Tiago, F., Gil, A., Stemberger, S., & Borges-Tiago, T. (2021). Digital sustainability communication in tourism. *Journal of Innovation & Knowledge*, *6*(1), 27-34.

Veblen, T. (1899). *The theory of the leisure class.* Modern Library.

Viswanathan, M., Seth, A., Gau, R., & Chaturvedi, A. (2009). Ingraining product relevant social good into business processes in subsistence marketplaces: The sustainable market orientation. *Journal of Macro-marketing, 29*(4), 406–425.

Worldwatch Institute. (2010). *State of the world: Transforming cultures, from consumerism to sustainability*. W. W. Norton.