Factors influencing consumers' supermarket visitation in developing economies: The case of Ghana

5

Schmidt H. Dadzie[1] and Felix A. Nandonde[2]
[1]Niels Brock Copenhagen Business College, Denmark, [2]Department of Business Management, Sokoine University of Agriculture, Morogoro, Tanzania

5.1   Introduction

The emergence of modern retail stores in Africa with self-service consumer goods has increasingly attracted the attention of scholars and researchers. Studies which have been conducted in the continent thus far have focused on the linkages of local food suppliers with supermarkets (e.g., Louw, Vermeulen, Kirsten, & Madevu, 2007; Nandonde, 2016; Nandonde & Kuada, 2016), supermarkets and gender (Sehib, Jackson, & Gorton, 2013), and consumers' behavior in supermarkets (Neven, Reardon, Chege, & Wang, 2006). These studies, however, examined supermarkets in Kenya and South Africa, since the sector in these countries is much more advanced. Furthermore, these studies paid little attention to consumers' motives for visiting modern stores. Africa has witnessed the emergence of supermarkets, but little is known of the factors influencing consumers' visits to these retail outlets (Meng, Florkowski, Sarpong, Chinnan, & Resurreccion, 2014).

Previous studies on Ghanaian supermarkets focused on consumers' demography and purchase behavior (Meng et al., 2014), the food retail environment, and consumer access to various food retail formats (Oltmans, 2013). Other works looked at consumer motivations for visiting malls (Hinson, Anning-Dorson, & Kastner, 2012). Most studies on supermarket visitation usually focus on analyzing consumer choices between traditional food retailers and modern food retailers but do not pay specific attention to supermarkets as a different format of grocery shopping (Oghojafor, Ladipo, & Nwagwu, 2012; Aryeetey, Oltmans, & Owusu, 2016). According to Ahmed, Ghingold, and Dahari (2007) and Nandonde and Kuada (2014), there is a need for future research to include more demographic variables in understanding motivational factors that influence consumers into buying food items from supermarkets. The current study, therefore, takes this specific focus.

5.2   Supermarkets in Ghana

Retail business is increasing in Ghana and is forecast to rise from US$8 billion in 2015 to US$11 bilion in 2019 (USDA, 2017). Furthermore, Ghanaians have witnessed the emergence of local and international supermarkets, including South African supermarket chains, such as Shoprite (see Table 5.1), which are located in the malls in the capital, Accra. However, there are also local retailers that have, over the years, established themselves as "mega markets" throughout the country. A good example is Melcom Group, which has over 30 shops across the country. There are also a growing number of local supermarkets that serve specific regions in the country. However, supermarkets are still estimated to account for only 4% of the country's annual retail sales (USDA, 2017). This calls for a need to understand what motivates buyers into purchasing goods in the supermarkets of developing economies, and in Ghana specifically, with a view to understanding the potential for growth within the sector.

At the other end of the food retail spectrum are huge numbers of small-scale food retailers which are located in convenient places and offer food products to customers at varied prices and quality. These businesses, which are typically located in open-air markets in various towns and cities in Ghana, are normally referred to as *traditional* food retailers. Most of the retail needs of Ghanaians are served by the informal sector, usually by vendors using small tabletop shops and street stalls, all of which account for approximately 90% of the country's retail activity (AtKearney, 2014). Although supermarkets are not largely entrenched in Ghana, they give a degree of choice to consumers. They provide convenient parking spaces, a clean environment, sales promotions, return policies, and air-conditioned shopping areas for customers. This is a direct contrast to what traditional shops can provide; which is, better bargaining and fresh foods. As the supermarket retail format begins to take hold and evolve in Ghana, consumers' motives for buying food are likely to change. It is therefore vital to understand the factors that influence consumers' choice of these new retail formats.

Table 5.1 Some of the supermarkets that operate in Ghana

Name of the company	Number of stores	Country of origin
Melcom Group	35	Ghana
Shoprite	5	South Africa
Maxmart	5	Ghana
Marina supermarket	1	Ghana
Eakaza Limited	5	Ghana
Lara mart	5	Ghana
Shop-n-Save	5	Ghana
Game	1	South Africa
A life supermarket	3	Ghana
All needs	7	Ghana

Source: USDA (2017).

5.3 Literature review

Supermarkets need to evaluate consumers' behavior based on their visitations because this is a proxy for store patronage (Hutcheson & Moutinho, 1998). The current study draws from the theory of planned behavior (TPB) in understanding consumers' store visitation motives, as proposed by Ajzen (1985, 1991). The theory holds that consumers' behavioral intention is influenced by external factors, which are attitudes, norms, and perceived behavior control. The theory holds further that the effects of these factors may vary across different consumers' behaviors and situations.

According to Azjen (1991), motivation is a central factor of TPB. Thus, it can be argued that there must be a motivation for a buyer to visit supermarkets. This motivation could either be economic or social gains. As Fishbein and Azjen (1975) argue, a person's attitude towards an object is measured by his or her beliefs of salient attributes that the object has, and his or her evaluation of each attribute. Therefore, for a person to engage in a certain behavior, he or she must believe that there is a benefit from his/her engagement in that behavior (Lam & Hsu, 2004).

In general, previous studies show that food has a relatively higher price in modern supermarket stores than is the case in traditional stores (Minten & Reardon, 2007; Neven et al., 2006). Indeed, in developing economies, including Ghana, supermarkets are perceived to be shops for high-status end consumers. Thus, shopping in supermarkets in Ghana can be considered as a marker of social class and is perceived as a luxury for most consumers. That means if a customer visits a supermarket in Ghana, then he/she is likely to have a reason that motivates this visit beyond straightforward economics.

Tauber (1972) asserts that people's shopping motives go beyond satisfaction and he classifies these into personal and social motives. Personal motives include the need for role-playing, diversion, self-gratification, learning about new trends, physical activity, and sensory stimulation. Social motives, on the other hand, relate to satisfaction from shopping that is socially created. It includes satisfaction from communicating with other shoppers and the social experience of shopping, along with the pleasure of bargaining. A person will shop when their needs for these motives are strong and can be satisfied through shopping activity.

Recent studies in developing economies have shown that there are a number of factors that motivate consumers into visiting supermarkets. Such factors include an increase in income (Reardon & Hopkins, 2006), ownership of the means of transport such as cars, and ownership of storage facilities such as refrigerators (Gorton, Sauer, & Supatpongkul, 2011). However, recent developments in African shopping trends have shown that even at the level of the village, supermarkets are also emerging and that consumers from low-income brackets will visit (Nandonde, 2016). On the other hand, a number of supermarkets are not performing well in the continent. For example, the failure of Shoprite in Uganda and Tanzania was associated with the failure of the retailers to understand consumers' needs.

As The Economist (2015) argues, one of the challenges for those firms that invest in Africa is a lack of understanding of consumer behavior there.

5.4 Methodology

5.4.1 Research design

A cross-sectional research design was carried out in two Ghanaian cities, Accra and Kumasi, in order to explore the factors that influence consumers into shopping in modern food retail supermarket stores. Accra is the capital city of Ghana and, with a population of 4 million, accounts for 16.3% of the country's total population. Kumasi also has a largely urbanized population of about 1,730,249 according to the 2010 population and housing census (Ghana Statistical Service, 2012). Modern food retail establishments such as supermarkets are springing up in these urban areas and are increasingly serving as an alternative to more traditional food retail outlets. However, the spread of these supermarkets has at best been uneven. Supermarkets that are located in the city centers of Accra and Kumasi are mostly in shopping malls, with some of them also opening chains of stores in high-income suburbs. Accordingly, the selected supermarkets for this study also followed this geographical pattern.

5.4.2 Sample and sampling procedure

The respondents for this study were selected from a convenience sample of 388 individuals. A questionnaire was administered at the shopping sites for shoppers to fill out after they had completed their shopping. Five supermarket chains were selected from across 13 supermarket locations for the study. Efforts were made to undertake the research at supermarkets that sell or deal with similar products and have similar physical attributes and similar levels of convenience for shoppers. For instance, all the selected supermarkets in the study locations had designated parking areas, large shopping areas, and all had self-service. The malls ranged in size from 6,230 to 27,500 square meters (USDA, 2017). Furthermore, the supermarkets have rented spaces, each of which is above 100 square meters (USDA, 2017). These features distinguished the supermarkets from other food retail outlets such as open-air markets.

5.4.3 Data collection

Following the agreement with supermarket managers, the data collection process began. The data were collected from May to June 2015 using a questionnaire that had previously been pilot tested on 30 respondents and revised accordingly. Questionnaires were administered by university students, who were supervised by teaching and research assistants with experience in data collection. Since the

questionnaire was developed in English, issues such as translation of terms into local languages were considered carefully by the researchers to avoid misinterpretation. The questionnaire was administered on different days during the study period, and at various times of the day, to avoid bias. The target sample size of viable returns was set at 300. This was deemed to be an adequate number of respondents for multivariate analysis techniques such as factor analysis (Hair, Black, Babin, & Anderson, 2009). During data collection, some 388 questionnaires had to be administered to reach this target, with 88 of the 388 returns discounted as they were either incomplete or had errors.

The questionnaire was developed with inspiration from prior studies on consumer shopping typologies (Buttle, 1992; Jamal, Davies, Chudry, & Al-Marri, 2006; Kenhove & De Wulf, 2000). The questionnaire comprised 38 questions. Twenty-six questions measured shopping influencers on a seven point Likert scale, ranging from 1 ("strongly agree") to 7 ("strongly disagree"). The remaining questions collected information on demography and the food shopping behavior of respondents. Data analysis involved an initial description of demographic factors relating to shoppers. A factor analysis was then carried out using data from the 26 Likert questions, with the aim of ascertaining those factors that influence consumers to shop for food in supermarkets. The identified components were then combined using summated scales. Finally, the relationship between demographic variables and the factors influencing consumers to shop in supermarkets was analyzed.

5.5 Results

5.5.1 Respondents' profile

A descriptive analysis of the respondents ($n = 300$) is presented in Table 5.2. The findings show that females comprised 54% and males 46% of the total sample. With regards to age distribution, the findings show that respondents below 35 years accounted for 78% of the shoppers. Out of this, 43.7% were under the age of 25 years, and 34.3% fell between the ages of 26 and 35 years. This trend broadly reflects Ghana's national demographic distribution in age, whereby younger age groups dominate (Ghana Statistical Service, 2012).

Approximately 3% of the respondents indicated they did not have had any formal education, with around 23% and 46% having secondary education or a diploma/bachelor degree, respectively. Furthermore, 19% indicated they had completed postgraduate education. This shows that the respondents were generally highly educated and confirms previous research (see e.g., Neven et al., 2006) indicating that customers who visit modern retail formats in emerging markets tend to be well educated. Income levels were normally distributed with approximately 11% of the respondents having a monthly income of up to 100 Ghanaian cedis, and 42% of respondents' incomes falling between 101−500 and 501−1000 Ghanaian cedis a

Table 5.2 **Respondent demographics**

	n	*%*
Gender		
Female	162	54
Male	138	46
Total	**300**	**100**
Age		
Under 25	131	43.7
25−35	103	34.3
36−45	32	10.7
46−55	32	10.7
Above 56	2	0.7
Total	**300**	**100**
Monthly income in Ghanaian cedis[a]		
0−100	32	10.7
101−500	85	28.3
501−1000	41	13.7
1001−1500	22	7.3
1501−2000	10	3.3
Above 2000	5	1.7
Total	**195**	**65**[b]
Education		
No formal education	10	3.3
Basic education	26	8.7
Secondary education	69	23.1
Diploma/bachelor	137	45.8
Postgraduate	57	19.0
Total	**299**	**99.7**[b]
Employment		
Student	114	38.0
Employed	143	47.7
Unemployed	20	6.7
Housewife	20	6.7
Total	**298**	**99.3**[b]

[a]US$1 = 4.39 Ghanaian cedis, as at 27 October 2017.
[b]Missing values resulted in less than 100% response for variables.

month. The annual average wage of 2,623 Ghanaian cedis (Ghana Statistical Service, 2016) implies that supermarkets in the two studied Ghanaian cities are accessed not only by middle to high income customers, but also by other customers at lower income levels.

5.5.2 Exploratory factor analysis

Exploratory factor analysis was used as a data reduction technique that compresses data by looking for groups that have very strong intercorrelations within a set of large variables. The test was run several times to give more efficient components. Items/statement reduction was carried out and thereby factors with low factor loadings and communalities were deleted in order to improve the analysis (Costello & Osborne, 2005; Dhurup, 2008). Out of the original 26 questions relating to factors that might influence consumers into shopping in supermarkets, 7 items were deleted, leaving 19 items for the final analysis. The final analysis gave a four component solution and ignored all factor loading of below 0.40. The decision was made using the comparison of the eigenvalues.

The final run factors were tested to ascertain intercorrelation or the suitability of factorability with Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin test. The approximated chi square value of the Bartlett's Test of Sphericity was 2212.309 (df = 171) and significance was at 0.000. The Kaiser−Meyer measure of sampling adequacy was 0.729, which is considered as "middling" (see Hair et al., 2009). The four component results are presented in Table 5.3.

The 19 variables in the four factors were subjected to an internal consistency reliability analysis with the computation of the coefficient of alpha (Cronbach α). The Cronbach α provides a measure of the internal consistency of test scales. Internal consistency implies that all the test scales measure the same concept or construct (Tavakol & Dennick, 2011). Cronbach measures whether or not the various variables in the four factors measure similar motives (respectively). The alpha values must lie between $+0$ and $+1$ with alpha values ranging from 0.70 to 0.95 as acceptable. All the four factors recorded adequate levels of alpha with a total of $\alpha = 0.791$; number of items 19 with 300 sample size. The results are reported in Table 5.3.

Factor one was named "curious economic shopper" and comprised five variables including "hunt for a bargain," "I came to supermarket to chat with other shoppers," "I came to the supermarkets to compare prices with other options", "supermarkets have higher quality goods", and "I lose sense of time when I am in the supermarkets". Factor two was named "quality and safety": this comprised variables such as

Table 5.3 Internal reliability analysis: Cronbach α coefficients

Factors	Cronbach α
Curious economic shopper	0.781
Quality and safety	0.780
Aesthetic motives	0.750
Social motives	0.718
Total α	0.791

"it is always very easy to find what I want", "foods which are bought here are of higher quality than those from other locations", "I feel very secure in this supermarket", "the supermarket serves as a one-stop shopping place for me", and "I visit this supermarket for its complimentary services, better management, and promotion". Factor three was named "Aesthetic motives" and included the following: "this supermarket is beautifully designed to attract people like me", "the interior design of the supermarket usually attracts my attention", "I feel excited whenever I visited the supermarket", and "the environment inside the supermarkets attracts me". The fourth factor was named "social motives" and included variables such as "shopping would provide me with social experiences outside home", "when am in the supermarket I feel like I am in another world", "I visit supermarkets to meet new friends", and "I enjoy talking to other customers and sales people".

5.5.3 Demographic factors and shopping influencers

A one-way analysis of variance (ANOVA) and *t*-test were used to access the relationship between shopping influences and demographic factors. These statistical tools have been widely used to study shoppers' motives and demographic factors and have revealed varied evidence of relationships (Jin & Kim, 2003). The choice of which type of analysis to use depends on the kinds of data that makes up the demographic factors. A one-way ANOVA was used for interval or ratio variables (i.e., age group, income levels, educational levels), while the *t*-test was used to access the relationship for categorical demographic variables (i.e., gender, employment status) (Bryman & Bell, 2011). In all instances, Levene's test was used to access the level of significant relationship. A *P*-value of less than 0.05 is considered as a significant relationship. Significant relationships are further explored using a post hoc test to discover at which levels the differences occur. The results are presented in Tables 5.4 and 5.5.

The one-way ANOVA tests between three demographic variables showed different results from those factors which emerged from the factor analysis. The study shows that age and income are the factors that classify curious economic shoppers. Perhaps the study findings suggest that a good number of consumers who are visiting supermarkets are looking for products which are on promotion or on sale. No statistically significant differences were noted in income levels, quality and safety, social and Aesthetic motives. A significant difference was, however, observed between income levels and curious economic shoppers at the <0.05 significance level. Post hoc analysis was carried out to find at what level of income the differences occurred. The results show that the differences in the means between various levels of income are not significant. The study findings showed further that Ghanaian consumers visit supermarkets due to social motives. This includes a chance to meet friends. Similar findings are reported by Ahmed, Ghingold, and Dahari (2007) who showed that consumers in Malaysia visit supermarkets to socialize with friends.

Table 5.5 shows that employment has a significant influence on Aesthetic motives. This implies that respondents who are unemployed may have different

Table 5.4 **ANOVA results (between groups); Levene's test and decision**

Independent variable	Dependent variable	Sum of squares	Mean square	*F*-Ratio	Sig.	Levene's test	Decision
Income	Curious economic shopper	10.693	1690.466	1084.708	0.000	0.004	Accept
	Quality and safety	6.905	1.381	2.033	0.076	0.009	Reject
	Aesthetic motives	24.490	4.898	6.319	0.000	0.161	Reject
	Social motives	51.414	10.283	6.035	0.000	0.397	Reject
Age	Curious economic shopper	35.044	8.761	5.924	0.000	0.000	Accept
	Quality and safety	7.362	1.840	2.078	0.084	0.537	Reject
	Aesthetic motives	8.158	2.040	3.031	0.018	0.780	Reject
	Social motives	15.654	3.914	2.684	0.032	0.141	Reject
Educational level	Curious economic shopper	10.693	2.139	1.372	0.237	0.000	Reject
	Quality and safety	6.905	1.381	2.033	0.076	0.000	Reject
	Aesthetic motives	24.490	4.898	6.319	0.000	0.522	Reject
	Social motives	51.414	10.283	3.035	0.000	0.004	Accept

Table 5.5 *t*-Test with Levene's test independent variable

Independent variable	Dependent variable	Levene's test	Sig.	Decision
Employment	Curious economic shopper	0.000	0.001	Accept
	Quality and security shopper	0.097	0.463	Reject
	Aesthetic motive	0.027	0.000	Accept
	Social motive	0.936	0.020	Reject
Gender	Curious economic shopper	0.937	0.000	Reject
	Quality and security shopper	0.098	0.129	Reject
	Aesthetic motive	0.439	0.000	Reject
	Social motive	0.049	0.000	Accept
Vehicle ownership	Curious economic shopper	0.002	0.864	Reject
	Quality and security shopper	0.001	0.004	Accept
	Aesthetic motive	0.939	0.006	Reject
	Social motive	0.076	0.000	Reject

sensory satisfaction from respondents who are employed. Employed respondents may also show different economic motives for buying food from supermarkets. As Hinson et al. (2012) argue, hectic working conditions are likely to influence employees into shopping at places with a good environment, and this encourages them to migrate from traditional markets to supermarkets.

Being a male or a female has no significant effect on respondents' supermarket visitation motives. Our findings are in contrast with those of Kotze, North, Stols, and Venter (2012), whose study in South Africa found that gender has a significant impact on mall visitation.

Car ownership is not a significant factor in terms of being a curious economic shopper or Aesthetic motives. Neither does it have any significant influence on social motives. That means car ownership is not a factor that motivates consumers in Ghana to visit supermarkets. Our finding is in contrast with the findings in a study by Gorton et al. (2011) who showed that supermarkets in developing economies emerged due to car ownership. This finding correlates with the emergence of curious economic shoppers who are influenced by promotion and discounts which are offered by supermarkets.

The post hoc test was run for educational level and social motives. The results show that respondents with basic level education differ significantly from the respondents with a diploma or bachelor degree in terms of social motives. Secondary school certificate holders also differ from diploma or bachelor degree holders, as shown in Table 5.6. This means that respondents with low education have social motives for shopping at supermarkets which are different from those individuals with higher education.

Table 5.6 Post hoc multiple comparisons: educational levels and social motives

Educational level	Educational level	Mean difference	Std. error	Sig.	95% Confidence interval	
					Lower bound	Upper bound
No formal education	Basic education	1.0974	0.44637	0.114	−0.1280	2.3229
	Secondary education	0.9295	0.40590	0.119	−0.1148	1.9738
	Diploma/bachelor level	0.4165	0.39294	0.917	−0.5442	1.3773
	Postgraduate	0.5450	0.41127	0.807	−0.5281	1.6182
Basic education	No formal education	−1.0974	0.44637	0.114	−2.3229	0.1280
	Secondary education	−0.1680	0.27605	0.999	−0.9250	0.5891
	Diploma/bachelor level	−0.6809[a]	0.25661	0.046	−1.3543	−0.0075
	Postgraduate	−0.5524	0.28389	0.389	−1.3383	0.2335
Secondary education	No formal education	−0.9295	0.40590	0.119	−1.9738	0.1148
	Basic education	0.1680	0.27605	0.999	−0.5891	0.9250
	Diploma/bachelor level	−0.5129[a]	0.17708	0.035	−1.0052	−0.0206
	Postgraduate	−0.3844	0.21471	0.533	−0.9892	0.2203
Diploma/bachelor level	No formal education	−0.4165	0.39294	0.917	−1.3773	0.5442
	Basic education	0.6809[a]	0.25661	0.046	0.0075	1.3543
	Secondary education	0.5129[a]	0.17708	0.035	0.0206	1.0052
	Postgraduate	0.1285	0.18907	0.999	−0.3927	0.6496
Postgraduate	No formal education	−0.5450	0.41127	0.807	−1.6182	0.5281
	Basic education	0.5524	0.28389	0.389	−0.2335	1.3383
	Secondary education	0.3844	0.21471	0.533	−0.2203	0.9892
	Diploma/bachelor level	−0.1285	0.18907	0.999	−0.6496	0.3927

Based on observed means. The error term is Mean Square (Error) = 1.439.
[a]The mean difference is significant at the 0.05 level.

5.6   Discussion and conclusions

This study aimed to understand the factors that influence Ghanaian consumers into buying goods in supermarkets. The findings indicate that demographic factors influence consumers' decisions in purchasing commodities from supermarkets. In general, the study shows that consumers who visit supermarkets are mainly young and this correlated with the findings of Gorton, Sauer, and Supatpongkul (2009). The exploratory findings suggest that educated people dominate supermarket visitation in developing economies. Contrary to previous findings by Traill (2006), which shows that consumers who visit supermarkets in developing economies do so by using their own vehicles, in general, the study shows that most consumers who visit supermarkets are those who are going to experience a new mode of distributing consumer goods in Ghana.

The findings of this study can be used by supermarket management to comprehend the reality that consumers who visit supermarkets come from different demographic segments. For example, the study shows that visitors are mostly shoppers who are looking for sales promotions. This suggests that in order to attract all types of buyers in developing economies, retailers should provide low-cost products. In general, previous studies show that customers in developing countries are price-conscious (Mai & Zhao, 2004).

The current study shows that TPB theory can be used to understand behaviors that influence consumers in Ghana. Specifically, the study contributes to the TPB; in that what motivates consumers is the outcome of their decisions. Consumers who are visiting supermarkets are not those from the "have" class alone, but also come from the "have not" class. In general those from the "have not" class are visiting supermarkets having decided not to go to traditional retail stores due to the availability of sales promotions at supermarkets. The study shows that despite modern retail stores being perceived as areas for high-end consumers in Africa, recently low-income consumers are observed to have been migrating to the stores from traditional markets. This indicates that the prospects of having more consumers purchasing commodities from supermarkets is promising.

Supermarkets are emerging in Africa and this indicates there will be more competition amongst retailers who operate in the continent. Our study has two specific implications for supermarket management: First, esthetic factors influence African consumers to shop in supermarkets as opposed to shopping in the traditional market. This implies that in order to compete, retailers should design a more attractive environment for consumers, including car parking and merchandise display, and should invest more in these areas. Second, the study shows that Ghanaian consumers also visit supermarkets so that they can socialize. This implies that supermarket managers should create more areas within their store premises for recreation purposes, to attract more customers and be competitive in Ghana.

In spite of the contribution of the study, there are some limitations. The study used convenience sampling due to budget and time constraints. It is recommended that future research should use random sampling to understand how consumers

perceive different facilities provided by retailers. Furthermore, Africa has witnessed urbanization of its cities in different countries, but little is known on how consumers in different cities behave according to such geographical differences. In general, studies from China show that consumers' behaviors are different across cities (Wong & Yu, 2003). In this regard, more studies are needed to raise our understanding of what motivational factors seem important to consumers in different cities in developing economies.

References

Ahmed, Z. U., Ghingold, M., & Dahari, Z. (2007). Malaysian shopping mall behavior: An exploratory study. *Asia and Pacific Journal of Marketing and Logistics*, *19*(4), 331−348.

AtKearney, (2014). *The 2014 African retail development index: Seizing Africa's retail opportunities*. Available at https://www.atkearney.com/documents/10192/4371960/Seizing + Africas + Retail + Opportunities.pdf/730ba912-da69-4e09-9b5d-69b063a3f139.

Aryeetey, R., Oltmans, S., & Owusu, F. (2016). Food retail assessment and family food purchase behavior in Shongman estates, Ghana. *African Journal of Food, Agriculture, Nutrition and Development*, *16*(4), 11386−11403.

Azjen, I. (1991). The theory of planned behaviour. *Organization Behavior and Human Decision Processes*, *50*, 179−211.

Azjen, I. (1985). From intentions to actions: A theory of planned behaviour. In: Kuhl J, & Beckmann J (Eds.), Action control (pp. 11−39). Berlin: Springer.

Bryman, A., & Bell, E. (2011). *Business research methods* (3rd ed.). Oxford: Oxford University Press.

Buttle, F. (1992). Shopping motives constructionist perspective. *The Service Industries Journal*, *12*(3), 349−367.

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation*, *10*(7), 1−9.

Dhurup, M. (2008). A generic taxonomy of shopping motives among hypermarkets (hyper-stores) customers and the relationship with demographic variables. *ActaCommercii*, *8*(1), 64−79.

Fishbein, M., & Azjen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Addison-Wesley, Reading, MA.

Ghana Statistical Service (2012). *2010 Population and Housing Census*. Ghana Statistical Service, Accra.

Ghana Statistical Service (2016). *Ghana living standards survey round 6*. Ghana Statistical Service. ⟨http://www.statsghana.gov.gh/docfiles/glss6/GLSS6_Main%20Report.pdf⟩ (accessed 20 October, 2017).

Gorton, M., Sauer, J., & Supatpongkul, P. (2009). Investigating Thai shopping behaviour: Wet-markets, supermarkets and food quality. In: *83rd Annual Conference of the Agricultural Economics Society, Dublin* (Vol. 30).

Gorton, M., Sauer, J., & Supatpongkul, P. (2011). Wet markets, supermarkets and the "big middle" for food retailing in developing countries: Evidence from Thailand. *World Development*, *39*(9), 1624−1637.

Hair, J. F. J., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.

Hinson, R. E., Anning-Dorson, T., & Kastner, A. N. A. (2012). Consumer attitude towards shopping malls in sub-Saharan Africa: An exploration of the new retail format in Ghana. *African Journal of Business and Economic Research*, *7*(2−3), 97−134.

Hutcheson, G. D., & Moutinho, L. (1998). Measuring preferred store satisfaction using consumer choice criteria as a mediating factor. *Journal of Marketing Management*, *14*(7), 705−720.

Jamal, A., Davies, F., Chudry, F., & Al-Marri, M. (2006). Profiling consumers: A study of Qatari consumers' shopping motivations. *Journal of Retailing and Consumer Services*, *13*(1), 67−80.

Jin, B., & Kim, J. O. (2003). A typology of Korean discount shoppers: Shopping motives, stores attributes, and outcomes. *International Journal of Services Industry Management*, *14*(4), 396−419.

Kenhove, P. V., & De Wulf, K. (2000). Income and time pressure: A person-situation grocery retail typology. *The International Review of Retail, Distribution and Consumers Research*, *10*, 149−166.

Kotze, T., North, E., Stols, M., & Venter, L. (2012). Gender differences in sources of shopping enjoyment. *International Journal of Consumers Studies*, *36*, 416−424.

Lam, T., & Hsu, C. H. C. (2004). Theory of planned behavior: Potential travelers from China. *Journal of Hospitality and Tourism*, *28*(4), 463−482.

Louw, A., Vermeulen, H., Kirsten, J., & Madevu, H. (2007). Securing small scale farmers participation in supermarket supply chains in South Africa. *Development Southern African Journal*, *24*(4), 539−551.

Mai, L., & Zhao, H. (2004). The characteristics of supermarket shoppers in Beijing. *International Journal of Retail and Distribution Management*, *32*(1), 56−62.

Meng, T., Florkowski, W. J., Sarpong, D. B., Chinnan, M. S., & Resurreccion, A. V. A. (2014). Consumer's food shopping choice in Ghana: Supermarket or traditional outlets? *International Food and Agribusiness Management Review*, *17, A*, 107−130.

Minten, B., & Reardon, T. (2007). Food prices, quality and quality's pricing in supermarkets versus traditional markets in developing countries. *Applied Economic Perspectives and Policy*, *30*(1), 480−490.

Nandonde, F.A. (2016). *Linkages of local food suppliers in modern food retail in Africa: The case of Tanzania*. Unpublished PhD thesis, Aalborg University, Denmark.

Nandonde, F.A. and Kuada, J. (2014). Empirical studies of food retailing in developing economies. In: International Food Marketing Research Symposium, Aarhus Business School, Denmark, 19−20 June.

Nandonde, F. A., & Kuada, J. (2016). Modern retail buying behavior in Africa: The case of Tanzania. *British Food Journal*, *118*(5), 1163−1178.

Neven, D., Reardon, T., Chege, J., & Wang, H. (2006). Supermarkets and consumers in Africa: The case of Nairobi. *International Food and Agribusiness Marketing*, *18*(1−2), 103−123.

Oghojafor, B. E. A., Ladipo, P. K. A., & Nwagwu, K. O. (2012). Outlet attributes as determinants of preference of women between supermarkets and traditional open market. *American Journal of Business Management*, *1*(4), 230−240.

Oltmans, S.J. (2013). *A case study on the food retail environment of Accra, Ghana*. Unpublished Masters dissertation, Iowa State University, Ames, Iowa.

Reardon, T., & Hopkins, R. (2006). The supermarket revolution in developing countries: Policies to address emerging tensions among supermarkets, suppliers, and traditional retailers. *The European Journal of Development Research*, *18*(4), 522−545.

Sehib, K., Jackson, E., & Gorton, M. (2013). Gender, social acceptability and the adoption of supermarket: evidence from Libya. *International Journal of Consumer Studies*, *37*, 379−386.

Tauber, M. (1972). Marketing notes and communication: Why do people shop? *Journal of Marketing*, *36*(4), 46−49.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53−55.

The Economist (2015). *Africa's middle class: Few and far between*, 22nd October. ⟨https://www.economist.com/news/middle-east-and-africa/21676774-africans-are-mainly-rich-or-poor-not-middle-class-should-worry⟩ (accessed on 20 July 2016).

Traill, W. B. (2006). The rapid rise of supermarkets? *Development Policy Review*, *24*(2), 163−174.

USDA (2017). *Ghana: Retail food report, 2017*. ⟨https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Retail%20Foods%20Report%20_Accra_Ghana_5-22-2017.pdf⟩ (accessed on 20 May 2017).

Wong, G. K. M., & Yu, L. (2003). Consumers' perception of store image of joint venture shopping centres: First tier versus second-tier cities in China. *Journal of Retailing and Consumers Services*, *10*, 61−70.