

# **Exploring the Relationship Between Green Orientation, Customer Based Brand Equity (CBBE) and the Competitive Performance of SMEs in Ghana**

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*This paper explores the relationship between Green Orientation (GO), Customer based brand equity (CBBE) and the Performance of SMEs in Ghana. A cross-sectional survey design is used. Questionnaires were used in collecting data from managers and customers of SMEs. The sample comprises 298 owners and managers and 408 customers of SMEs. The study concentrated on green orientation and the relationship with the antecedent of customer based brand equity (brand awareness, brand association, perceived quality and brand loyalty). A conceptual framework was developed indicating the relationship between green orientation, brand equity and performance was developed and tested. The regression analysis conducted revealed that there is a strong influence of green orientation performance of SME by brand association and brand loyalty. Whereas, brand awareness and perceived quality did not show a strong influence of green orientation performance of SME.*

## **INTRODUCTION**

This study explores the relationship between Green Orientation (GO), Customer based brand equity (CBBE) and Competitive Performance of SMEs in developing countries focusing in Ghana. Though there are several research conducted in the area of SMEs in Ghana, much work has not been done in the area of green orientation, brand and the performance of SMEs. Though there is a growing concern of over the last decade about environmental depletion of natural resources, reduction in biodiversity, and climate change (Keijzers, 2005; Revell, Stokes, and Chen, 2009; Uhlaner, Berent-Braun, Jeurissen, and Wit, 2011a; Wilson, 2002). These concerns and discussions surrounding environmental sustainability have led to a significant body of research exploring and predicting the impact on -- and response by -- large, listed companies to environmental issues (Caniato, Caridi, Crippa, and Moretto, 2012; Dangelico and Pujari, 2010; Lieb and Lieb, 2010; Orlitzky, Siegel, and Waldman, 2011). The response has however been different for small and medium sized enterprises (SMEs). The scarcity of empirical research on how SMEs engage with environmental and social issues has been restated by several authors (Brammer, Hoejmoose, and Marchant, 2012; Gadenne, Kennedy, and McKeiver, 2008; Lee, 2009; Nadim and Lussier, 2012).

The significance of SMEs in most industrialised and developing economies suggests their environmental impact could be significant, thus warranting more research attention (Gadenne et al, 2008;

Purvis, Drake, Hunt, and Millard, 2000; Revell and Blackburn, 2007). Although environmental sustainability among SMEs has been identified as a critical issue, the volume and quality of research required driving changes in behaviour and practice does not reflect its significance (Redmond, Walker, and Giles, 2010). It is against this background that the researcher is motivated in looking at the relationship between Green orientation (GO), Customer based brand equity (CBBE) and performance the performance of SMEs in Ghana.

The rest of the paper is structured as follows. The second section provides a statement of the problem and the third section outlines the objectives of the study. The fourth section then reviews the relevant literature on green orientation, CBBE concept, the performance of SMEs from which hypothesised relationship of the constructs are derived. This is followed by the methodology that was used in executing the study. This section elaborates on the sampling methods and the reasons for the adoption of that method, and the sample size and characteristics. The sixth section outlines the results and discussions of the findings in accordance with the objectives of the study. Conclusions and suggestions for future research are provided in section seven and eight, respectively.

## **STATEMENT OF THE PROBLEM**

Many attempts to engage small and medium sized enterprises (SMEs) in environmental stewardship have had little or no success (UK Round Table on Sustainable Development, 1999). One problem is that many SMEs consider their environmental impact to be minor or even insignificant. The ‘real’ polluters are the multinationals. Evidence suggests the contrary (Hillary, 1995; ECOTEC, 1998; UK Round Table on Sustainable Development, 1999). Consequently, the success of any initiative aimed at changing SME environmental practice also involves bridging an information gap: to sensitize, inform or even educate SMEs about their environmental impact.

SMEs are increasingly recognised as the leading vehicle for economic development, and a prime source of employment, revenue generation, innovation and technological advancement in both developed and developing nations (Bosma and Levie, 2010). In Africa, SMEs make up about 90% of all economic activity, and contribute towards more than 50% of employment and GDP (Neneh and van Zyl, 2012). But despite the major role that SMEs play in the economy, scholars have reiterated that SMEs are “hard to reach” and “lagging behind” in terms of environmental sustainability initiatives (Cassells and Lewis, 2011; Groenewegen, 1996; Hillary, 2000; Rutherford, Blackburn, and Spence, 2000; Studer, Tsang, Welford, and Hills, 2008).

Whilst many SMEs may individually perceive little or no impact on the environment and may attempt to relieve themselves of any responsibility and the need to act, it has been stated that their collective impact is significant (Cassells and Lewis, 2011; Lewis and Cassells, 2010; Morsing and Perrini, 2009). It is clear that, although an individual firm’s environmental footprint may be small, collectively they contribute substantially to environmental damage all over the world (Gadenne et al, 2008; Revell and Blackburn, 2007; Spence, Agyemang, and Rinaldi, 2012). Despite concerns that SMEs are “lagging behind” recent research shows this narrow- minded position amongst SMEs is gradually changing (Revell et al, 2009). Scholars have proposed that SMEs can contribute to solving environmental problems through helping existing institutions in achieving their goals and by creating new, more environmentally sustainable products, services and institutions (York and Venkataraman, 2010)? Due to this, it is important to study the relationship between green orientation, customer based brand equity and whether it has significant impacts on the performance of SMEs to whether the building of brand equity significantly impacts on the performance of SMEs to deserve attention (in terms of resource allocation) from managers of SMEs. Hence, this study provides a comprehensive statistical relationship between green orientation, customer based brand equity and the performance of SMEs.

## OBJECTIVES OF THE STUDY

The main objective of the study is to examine the relationship between Green Orientation (GO), Customer based brand equity (CBBE) and the Performance of SMEs in Ghana. To achieve the purpose of the study, the following specific objectives are outlined

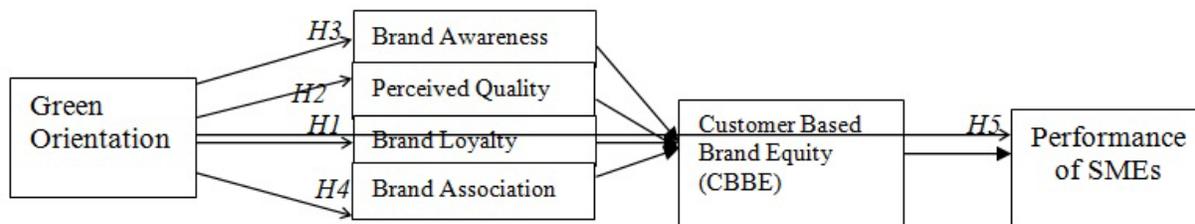
- To examine the relationship between green orientation and brand loyalty of SMEs
- To examine the relationship between green orientation and perceived quality SMEs
- To examine the relationship between green orientation and brand awareness SMEs
- To examine the relationship between green orientation and brand association SMEs
- To examine the relationship between green orientation and performance of SMEs
- To examine the relationship between green orientation and the antecedents of customer based brand equity (i.e brand awareness, brand association, perceived quality and brand loyalty) and the performance of SMEs

## HYPOTHESIS AND CONCEPTUAL FRAMEWORK

The under listed hypotheses are formulated for the study.

1. *H1. There is a positive relationship between green orientation and brand loyalty of SMEs.*
2. *H2. There is a positive relationship between green orientation and the perceived quality of SMEs*
3. *H3. There is a positive relationship between green orientation and brand awareness of SMEs.*
4. *H4. There is a positive relationship between green orientation and brand association of SMEs*
5. *H5. There is a positive relationship between green orientation and performance of SMEs*
6. *H6. There is a high predictive relationship between the antecedents of brand equity ( $H_{1a}$ : brand loyalty,  $H_{2b}$ : perceived quality,  $H_{3c}$ : brand awareness,  $-H_{4d}$ : brand association) and the performance of SMEs.*

**FIGURE 1**  
**CONCEPTUAL FRAMEWORK**



## LITERATURE REVIEW

### Going Green Marketing

According to Mourad, M. & Ahmed, E., Y., S., (2012) “Green” has been used as a symbol that represents a lot of brand positioning strategies such as organic, energy efficient and environmental friendly (Parker et al., 2009). They indicated a lot of companies worldwide are adapting a green marketing strategy for many reasons such as, securing themselves against regulations that may be applied, responding to green consumer demands and to compete with other green offerings (Grant, 2008), or changing their whole business philosophy (Polonsky and Rosenberger, 2001). Mourad, M. & Ahmed, E., Y., S., (2012) indicated that most consumers of the green brands use mostly the functional attributes of the green product that are related to its performance, and they derive from it a “functional benefit” that

makes them experience “environmental care” during their use for the product. In addition, the green products consumers experience “experiential benefits” which results in satisfying their needs to contribute to the welfare of the society. Finally, they gain “symbolic benefits” while using the brand (Rios et al., 2006).

It should be noted that climatic change has been considered of strategic importance to most executives and about 60 percent of them are considering it in the process of developing and marketing new products. Environmental regulations like Kyoto Protocol, the Waste Electronics and Electrical Equipment and Montreal Convention and the consumers’ environmental consciousness will highly impact the world’s business (Chen et al., 2006). Companies such as Lipton, SC Johnson and Ford are currently designing green products to enhance their business sustainability. The intentions of these companies suggest that there is a paradigm shift toward the environment and society which is driven by the market’s product innovation not just the governmental regulations (Berger et al., 2007).

Mourad, M. & Ahmed, E., Y., S., (2012) observed that from a study conducted by Fraj-Andre’s et al. (2008), Miles and Covin (2000), Miles and Munilla (1993), Pujari et al. (2003), Shrivastava (1995) and York (2009), there are lots of benefits that the corporations can gain when they integrate the sustainability into their businesses such as efficient use of resources, return on investment, entering new markets, increasing the sales and revenues, enhancing the corporate image, product differentiation and enhanced competitive advantages. Chen et al. (2006) found that the competitive advantage of the firm depends on both the green product and green process innovation.

### **Green Marketing Concepts and Definitions**

According to Mourad, M. & Ahmed, E., Y., S., (2012), most people believe that green marketing means only promoting products with environmental characteristics such as recyclable, ozone friendly, eco-friendly, while those are just green claims. However, Polonsky (1994), Ottaman (1998), and Chen (2009), observed that Green marketing is a broader concept that covers much more aspects such as consumer goods, industrial goods and services as well. The ultimate goal for green marketing is to create two bottom lines; the first is for profit and the second for social responsibility. However, it is not easy for all companies to market their green products; they should integrate the environmental concepts into all the marketing aspects in order to apply it successfully (Ottman, 1998).

Studies are suggesting that the green marketing activities should be carried out by the organizations to investigate the behaviors and attitudes of green consumers, identify the green markets and apply market segmentation according to the consumers’ needs and develop their positioning strategy and green marketing mix (Jain and Kaur, 2006). The activities are specified more by Ottman (2008) as he mentioned some rules to deliver a green marketing message effectively and avoid the pitfalls and seize the opportunities, those know the customer, empowering the customer, transparency in the message, reassure the quality and reconsider the price.

### **SMES and Green Management**

Where larger firms, often multinational enterprises, have been developing the capabilities needed to achieve the triple bottom line over the last decades, small and medium-sized enterprises (SMEs) often lack the knowledge, expertise, skills, finance and human resources to make the desired changes within organizations (Lee, 2008). In addition, it is often observed that the approaches are narrowly focused to specific features of the production process or the product when the SMEs attempted to change.

Thus, SMEs often have a limited view on the direction of future innovation and tend to tackle green issues in an ad hoc manner (Lee, 2008; Nawrocka, 2008).

With a small sample of Italian industries, Azzone et al. (1997) find the peculiarities of the small firms’ resources. These include lack of financial resources to assign to green initiatives, the ability of adapting its own organization from external stimuli, and the absence of an organizational unit specially aimed at managing environmental issues. In a similar vein, with a large sample of Korean industries, Lee (2007, 2008) identifies a current movement of SMEs in green management: SMEs are shifting from a

command and control approach to a market and competition approach in implementing green management.

Following the EU parliament's approval of the European Union (EU) directives on Waste Electrical and Electronic Equipment (WEEE), Restriction of Hazardous Substances (RoHS), and Eco-design for Energy using products (EuP), a leading group of companies in the electronics and consumer products industry, including Samsung, LG, Sony, Toshiba, NEC, IBM, HP, and Dell, have adopted "green" standards in their supply chain management. Final manufacturers often exercise buying power to pressure their suppliers to achieve superior environmental performance. As part of the RoHS-compliance program, many larger companies are asking their suppliers to verify parts and components compliance to secure compliance of the final products (Cusack and Perrett, 2006). Many of the suppliers over the supply chain are SMEs. At least 80 percent of all global enterprises are considered SMEs, having less than 250 employees (Moore and Manring, 2009).

### **Green Branding**

Mourad, M. & Ahmed, E., Y., S., (2012) stated that there are several justifications for the adoption of green marketing activities in different industries. Hence, green marketing activities will reflect positively on the company's intangible brand equity (Chen, 2009). Building a strong brand has always been a main objective, since it provides a lot of benefits such as; larger margins, greater opportunities for extension and maintaining strong position against competitors (Delgado-Ballester and Munuera-Aleman, 2005). Chen (2009) has developed a theoretical framework which shows that the green brand equity can be enhanced by green brand image, green satisfaction and green trust. He considered the green brand image, green satisfaction and green trust to be the drivers that increase the green brand equity, in an attempt to find a stand point to evaluate the concepts of green marketing under the new environmental trends. He relied on the definitions of brand image suggested by Keller (1993), Cretu and Brodie (2007) and Padgett and Allen (1997) as a set of perceptions and associations in the mind of the consumer that are linked to the offering. In addition, satisfaction can be defined as a level of pleasure that the consumer reach after the consumption due to fulfilling his desires (Oliver, 1996; Paulssen and Birk, 2007; Ruyter and Bloemer, 1999; Chen, 2009). Aaker (1991) and Keller (1993) developed the foundation for consumer-based brand equity research. From a cognitive psychology approach, Aaker (1991) who explained that "brand equity is the set of brand assets and liabilities that is linked to a brand, its name, and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firms customers".

These assets are brand awareness, perceived quality, brand associations, brand loyalty and other proprietary assets. Keller (1993) develops an alternative view and defines the concept of consumer -based brand equity as the differential effect of brand knowledge on consumer response to the marketing of the brand. Keller views brand equity in terms of brand awareness and the strength, favourability and uniqueness of brand associations that consumers hold in memory. Following these two approaches, this study uses a consumer-based brand equity measure that consists of four key constructs: brand awareness, perceived quality, brand associations, and brand loyalty.

#### *Brand Awareness*

Brand awareness is the first step to creating brand equity. This dimension refers to whether consumers can recall or recognise a brand and is related to the strength of a brand's presence in consumers' minds (Aaker, 1996). Perceived quality and brand associations are also two key dimensions of brand equity. Perceived quality refers to the perception of the overall quality or superiority of a product or service relative (Keller, 2003), while brand associations are the concepts that have links to the brand name in consumer memory (Keller and Lehmann, 2006). Brand awareness involves linking the brand to different associations in memory (Keller, 2003). Therefore, consumers must first be aware of a brand to later have a set of brand associations (Aaker, 1991). Brand awareness affects the formation and the strength of brand associations, including perceived quality (Keller, 1993; Pitta and Katsanis, 1995; Keller and Lehmann, 2003; Pike et al., 2010).

### *Perceived Quality*

Perceived quality is defined as a consumer's evaluation of a brand's overall excellence based on both intrinsic cues (e.g. performance, durability) and extrinsic cues (e.g. brand name, warranty) (Kirmani and Baumgartner, 2000). When consumers perceive a brand to be of high quality, they are more likely to purchase the brand over competing brands, pay a premium price, and choose the brand (Netemeyer et al., 2004). Perceived quality refers to the judgement or perception about the superiority of the product compared to others in the same category or close substitutes. It is the ability of a product to offer the necessary level of satisfaction better than other alternatives. As explained by Baldauf et al. (2003), the quality of a product is a significant resource that enables the firm to achieve competitiveness. When the firm creates a brand, they need to communicate the essence of the brand with the aim of positioning it in the minds of the audience in the marketplace so as to match the characteristics of the brand to the needs and expectations of the consumers. According to Hamann et al. (2007), branding contributes greatly to providing security and assuring customers of the quality of products. The development of powerful brands in a market arises from consistently providing a compelling experience to customers. The experience is achieved through the distribution channels, the product on offer, physical environment, employee behaviour and brand communication. These factors largely contribute to making the brand tangible to consumers (Abimbola and Vallaster, 2007). Having a high-quality brand is not only a prerequisite to being competitive in a market; it enables also the company that owns the brand to become attractive in the marketplace (Urde, 1994). The service encounter provided by the firm to its customers serves as the strongest impression of quality of the brand; hence, every interaction between the firm and its customers affects the brand image (De Chernatony and Drury, 2006).

### *Brand Association*

According to Lassar et al. (1995), brand association refers to the relative strength of a consumer's positive feelings towards the brand. The interaction between customers and other relevant stakeholders has an influence on the brand equity of the firm. It has been argued by some researchers that when the customers' experience of a product or brand is positive, the brand becomes stronger and there is a positive reputation of the brand (Abimbola and Vallaster, 2007). A study by Hamann et al. (2007) reveals that buyers often patronize and are also willing to pay premium prices for those products that are branded when they have a choice to select from products that fall into the same category. Buyers eventually identify with the brand and they also form some emotional bond with and sentimental attachment to the brand (Lassar et al., 1995). Consumers use the name of the brand to make inferences about the quality of a product they are not familiar with mainly because the brand name tends to build a reputation of the product as a result of the associations it has by virtue of its name and the utility or value of the product (Lassar et al., 1995). Some researchers (Simmons, 2007) explain that a brand evokes in the mind of customers a certain presence, personality and product or service performance. The associations can be either a functional consequence or a symbolic meaning (O'Loughlin and Szmigin, 2005). According to Balmer and Gray (2003) buyers are usually persuaded to believe in some perceived cordiality associated with a particular brand. Hence, consumers tend to consume the brand and associate themselves with the brand to identify who they are, who they wish to be and/or how they wish to be seen. Brands become competitive in the marketplace as a result of the associations and behaviour of consumers towards them. Simply put, buyers tend to develop relationship with brands and such a relationship substitutes for human interaction between the firm and its customers. According to Delgado -Ballaster and Munuera-Aleman (2005), this relationship is known as relational market based brand equity.

### *Brand Loyalty*

Brand loyalty is defined as a tendency to be loyal to a particular brand such that the consumer intends to purchase the brand routinely and resists switching to other brands (Yoo et al., 2000). When a customer is loyal to a product or a brand, they consider it as their first option or choice and they are not influenced or affected by the strategies that are employed by competitors to lure them or get their attention (Tong and Hawley, 2009). Unlike the other antecedents of brand equity, brand loyalty develops from actual buying

and usage of the product or brand (Baldauf et al., 2003). It is often indicated by the favourable attitude of consumers towards a brand, demonstrated by repeated purchase of the brand over time (Urde, 1994).

Brand equity is influenced by the subjective evaluation of any direct (e.g. trial, usage) and indirect contact (e.g. advertising, word of mouth) with the brand (Delgado-Ballaster and Munuera-Aleman, 2005; Keller, 1993). Consequently, in order to achieve brand equity, it is important for firms to develop marketing strategies that not win only customers but also build trust and loyalty. Brand loyalty is an important characteristic of brands with high equity (Atilgan et al., 2005; Tong and Hawley, 2009; Aaker, 1991). When a firm succeeds in building loyalty in the marketplace for its products and services, it leads to certain marketing advantages. The marketing advantages include price premiums, market share and greater trade leverage and reduced marketing costs (Delgado-Ballaster and Munuera-Aleman, 2005)

### **Firm Performance**

Since business performance is an important area, it attracts considerable amount of attention in marketing literature (Cavusgil and Zou, 1994; Morgan et al., 2002; O’Cass and Julian, 2003; Ogunmokun and Ng, 1999; Styles, 1998; Wong and Merrilees, 2005, 2007) and in the strategic management literature (Calantone and Knight, 2000; Chen and Hu, 2002; Pan and Chi, 1999; Prescott, 1986; Slevin and Covin, 1997). However, the construct has not been adequately developed and tested due to the conceptual and methodological problems (Keats, 1988; Lewin and Monton, 1986). Firm performance in the marketing literature has been rooted in the concept of microeconomics such as profit maximisation (Styles, 1998). Profit is said to be maximized when marginal revenue equals to or bigger than marginal cost. As a result, one of the streams of the marketing objectives is concerned with the measure of profit such as return on investment (ROI) and profit to sales ratios. Another stream has focused on the sales-driven measures such as sales growth and market share (Day and Wensley, 1988). These are referred to as objective measurements. In addition, marketing literature also shows that firms can have goals focused on competitor (Day and Wensley, 1988) or associated with geographic emphasis (Appiah-Adu, 1999; Beamish and Craig, 1993). These are generally referred to strategic objectives.

## **RESEARCH METHODOLOGY**

### **Sampling the Population**

The present study sampled managers and business owners as well as customers in the SME within two major cities (Accra and Tema) in Ghana. The sample was restricted to these two cities because that is where most of the SMEs are located in Ghana. The study can be seen as an exploratory, descriptive and quantitative research design. The main data collection method was primary in nature and involved information from SME owners and managers in various industries as well as customers. The reason for choosing SME owners and managers is that they are usually the custodians of business information and they hold control of the business and take key decisions regarding the daily activities of the business. The present study was also made up of customers because their inclusion is very important as the study aims to confirm the results from green orientations.

The study employed a semi-structured questionnaire with both open and close-ended questions. The population of study was made up of SMEs in Ghana as well as various consumers of SME products. Currently there is no comprehensive data on the specific number of SMEs operating in Ghana. However, this study used information available from a database provided by the Association of Ghana Industries (AGI) and the National Board for Small Scale Industries (NBSSI). The various categories of SMEs operation were in trade, agriculture and manufacturing. In all, 700 respondents participated in the study. This made of 298 owners/managers of SMEs, indicating a response rate of 41.7%, and 408 customers, indicating a response rate 58.3%. The sample size and the response rate are consistent with related studies (see Blankson and Cheng, 2005). In order to ensure that various sectors of SMEs were covered, stratified random sampling was used. However, a simple random sampling method was used in the selection of customers.

## RESULTS AND DISCUSSIONS

### Demographic Characteristics

Table 1 shows that majority of SMEs are into trade. 56.0% ( $n = 392$ ) of the sample were into trading, 10.4% ( $n = 73$ ) were into agriculture and 33.6% ( $n = 235$ ) were into manufacturing. This results of the study confirms the dominance of trading as far as SMEs in Ghana are concerned. The result revealed majority of 88.4% ( $n = 619$ ) of SMEs traded in soft goods. This is not surprising because the hard goods are capital intensive and most SMEs do not have the financial resources to venture into such business in Ghana.

The result indicates that, the mean number of employees is approximately 47 with the standard deviation around this value being 14.42. According to Mensah (2004), Ghanaian SMEs employ between 6 and 99 workers. The sample is largely consistent with the literature's definition of SMEs in Ghana. Again, the results show that, the sampled SMEs have been in operation for approximately 15 years on the average. With a relatively wide standard deviation of 18.43, it can be observed that the SME sector is growing rapidly and the number of SMEs is increasing by day. Furthermore, the results show that, on the average, sales turnover annually keep increasing annually across SMEs. This means that the significance of the SMEs sector in the Ghanaian in terms of employment generation and income is strengthened.

**TABLE 1**  
**DEMOGRAPHIC CHARACTERISTICS**

Item/Statistic	Frequency	Percentage	Mean	Std. Deviation
<b>Type of Business</b>				
Trade	392	56.0		
Agriculture	73	10.4		
Manufacturing	235	33.6		
<b>Total</b>	<b>700</b>	<b>100.0</b>		
<b>Types of Goods</b>				
Soft	619	88.4		
Hard	81	11.6		
<b>Total</b>	<b>700</b>	<b>100.0</b>		
Number of staff			47.12	14.42
Years of operation			15.09	18.43
Change in sales turnover			2.17	0.63

### Construct Reliability and Validity

To examine the reliability of the scales, the Cronbach's alpha test was used. Cronbach's alpha for all the construct was calculated and found to be 0.82 indicating satisfactory internal consistency reliability (Francis, 2001; Robinson et al., 1991). Content validity was achieved by having a comprehensive literature review and SME owners and managers opinions inputted in the survey. The critical ratios of all the items were found statistically significant at the 0.05 significance level, demonstrating strong convergent validity of the measurement level. The discriminant validity was examined by the method advocated by Fornell and Larcker (1981). Table 2 depicts the average variance extracted in exploratory factor analysis in pairs and the correlations of all the constructs. The results confirmed the discriminant validity of all the items.

**TABLE 2**  
**DISCRIMINANT VALID TEST USING AVERAGE VARIANCE EXTRACTED AND CORRELATION METHODS**

<b>Constructs</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Green orientation -1	1.00	82.0%	71.0%	66.0%	65.0%	61.0%
Brand loyalty- 2	0.21**	1.00	69.0%	72.0%	74.0%	70.0%
Perceived quality - 3	0.33**	0.34**	1.00	64.0%	69.0%	67.0%
Brand awareness - 4	0.14**	0.17*	0.16**	1.00	71.0%	69.0%
Brand association - 5	0.39**	0.21**	0.41**	0.23**	1.00	76.0%
SME performance - 6	0.22**	0.29**	0.23**	0.16*	0.23**	1.00

Note:

1. Upper and lower diagonals show average variance extracted results and correlations of the constructs respectively.
2. \*Correlation is significant at the 0.05 level (two-tailed); \*\*correlation is significant at the 0.01 level (two-tailed)

From Table 2 it can be seen that the green orientation level is significant and positively related to the performance of SMEs. The results of the study also indicates that the brand equity dimensions (brand loyalty, perceived quality, brand awareness and brand association) had a positive relationship with green orientation as well as the performance of SMEs. Hence, all the four hypothesis were all confirmed. This finding confirms the assertion by Baldauf et al. (2003) that the antecedents of brand equity have a positive relationship with the performance of firms.

Table 3 shows that there is a relatively low level of green orientation. This is characterised by the low levels associated with brand loyalty, perceived quality, brand awareness and brand association. The findings in Table 3 shows that when the green orientation is small, there is a lower attraction of loyalty from customers because of their small size (see, Hoek et al., 2003). Also, there is an increase in the green orientation level when brand loyalty increases (see, Atilgan et al., 2005). Furthermore, the study revealed that there was a low level of performance of SMEs in relation to competitors and sales turnover. However, the study recorded success with the introduction of new products.

**TABLE 3**  
**GREEN ORIENTATION, BRAND EQUITY AND PERFORMANCE OF SMES IN GHANA**

	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>SD</b>
Green orientation	1.33	4.21	2.01	0.46
Brand equity				
Brand loyalty	1.69	6.21	2.83	0.43
Perceived quality	1.23	5.11	2.71	0.43
Brand awareness	1.01	3.98	3.23	0.41
Brand association	1.21	3.99	3.07	0.32
SME performance				
New product success	1.73	3.99	3.21	0.41
Performance in relation to competitors	1.02	3.36	1.62	0.43
Sales turnover	1.00	2.32	1.78	0.27

Table 4 presents the multiple regression analysis of the brand equity constructs and SME performance. SME performance formed the dependent variable, and model summary found that the brand equity constructs predict 25.0 % of SME performance variance, with an adjusted  $R^2$  of 0.250 and an  $R^2$

of 0.257. The F change was 21.36 with a significant F change of 0.000. It results further indicated that there is a contribution of 21.3% of brand loyalty, 4.3% of brand awareness and 19.8% of brand association, which represents a significant change in the performance of SMEs; hence,  $H_{1a}$ ,  $H_{3c}$  and  $H_{4d}$  were confirmed. This means perceived quality was not found to be significant in predicting the performance of SMEs; hence,  $H_{2b}$  was not supported. The results from the analysis indicated that when brand loyalty is high, then there is a stronger effect of brand equity on the performance of SMEs; therefore, H6 was supported.

Furthermore, the result shows that the brand loyalty and brand association standard coefficient were much higher compared to the standard coefficient of perceived quality and brand awareness. This finding confirms the studies by researchers such as Atilgan et al. (2005), Baldauf et al. (2003) and Kayaman and Arasli (2007). The results of the study also confirms the research of Tong and Hawley (2009), which indicated that brand loyalty and brand association significantly influence brand equity and are key determining factors of strong brand equity and performance in SMEs. The strength of brand association in predicting SME performance also supports the assertion by Keller (1993) that brand image is a reflection of attributes of brand associations which are the factors that consumers keep in their memory and associate with the brand for the purpose of recall. Hence, apart from the known factors that contribute to SMEs' competitiveness, like price, personal contacts with customers and networking, personalised marketing and mass customisation, researchers such as Wood (2000) and Abimbola and Vallaster (2007) explain that SMEs can leverage the antecedents of brand equity to build or develop their competitiveness.

**TABLE 4**  
**MULTIPLE REGRESSION MODEL OF BRAND EQUITY AND SME PERFORMANCE**

Model	Un-standardized coefficients		Standardized coefficients	t	Significance
	B	SE			
			Beta		
(Constant)	1.014	0.243		3.133	0.000
Brand loyalty	0.289	0.112	0.213	2.234	0.000
Perceived quality	0.006	0.073	0.005	0.219	0.737
Brand awareness	0.049	0.063	0.043	0.739	0.042
Brand association	0.201	0.069	0.198	3.461	0.021

From the results of the study, recommendations can be made to enable SMEs to develop appropriate strategies that will make them highly competitive on the market. Chen et al. (2006) found that the competitive advantage of the firm depends on both the green product and green process innovation. It has become necessary for managers and owners of SMEs to shift their attention and efforts towards building brand loyalty among consumers. Also, the level of green orientation and brand association should be strengthened. These variables will contribute to sustaining the brand equity of SMEs while significantly influencing their performance. Moreover, these variables can be described as a prerequisite for business growth in the short run of operation and survival in the long run. However, the concentration on green orientation, brand association and brand loyalty does not necessarily mean that managers and owners of SMEs must downplay the significant effect of perceived quality and brand awareness. Previous studies (Myers, 2003; Keller, 2003; Wood, 2000; Baldauf et al., 2003), have indicated that, there is a high level of correlation and inter-connection among the antecedents of brand equity. These studies formulated and tested hypotheses and found a high level of association between green orientation, brand loyalty, perceived quality, brand association and brand awareness. According to Kayaman and Arasli (2007), brand awareness tends to create familiarity in the consumer's mind to consider the brand, while Aaker (1991) explains that the main attribute that triggers differentiation is perceived quality. Although this study did not find a statistical prediction of the performance of SMEs by perceived quality, it does not mean that these construct of brand equity is irrelevant.

Furthermore, the green orientation of a firm must reflect in its philosophy, the quality of green product and a performance pledge to customers to achieve brand equity. The function of a brand is to establish the status of the enterprise in the minds of consumers and to create awareness of the brand on the market. Additionally, SMEs need to exercise caution when they have to choose a medium or variable to build their competitiveness. This is due to the fact that, building a green orientation and developing brand equity is quite expensive since resources are limited in supply and existence of insufficient marketing budgets of SMEs making it a difficult task to achieve. It will be beneficial to develop strategies with a combination of green orientation and all the antecedents of brand equity. However, SMEs are required to focus on a particular aspect of green orientation and brand equity constructs that they can effectively manipulate in order to stay in the market competition. This study recommends the building of brand loyalty among consumers in the market.

## CONCLUSIONS

The study concludes that the performance of SMEs and brand equity are high when there is high brand loyalty among customers. The role played by brand management in a firm's performance in general and SMEs in particular cannot be over emphasised. Developing and implementing brand equity, the creativity and innovation of the entrepreneur is indispensable. Building strong brand equity is a more complex activity which takes time. Although financial resources is a major determinant of brand equity building, it is recommended that SMEs explore and make full use of their unique trademarks, effectively and efficiently using limited resources and strengthening their core values will gradually build up their brands.

## LIMITATION AND SUGGESTIONS FOR FURTHER RESEARCH

Future research could examine the extent of prediction by the antecedents of brand equity in both SMEs and large enterprises. Also, it would be useful to study major decision-making factors when building a green orientation in both small and large enterprises. Furthermore, future studies could focus on variations across industries with regard to the impact of green orientation on the performance of firms. Industries such as services, manufacturing and trade could be investigated to find the predictive power of the antecedents of brand equity. The study is limited to only two cities in the Greater Accra region of Ghana. Future studies need to be done if the results are to be expanded to other cities in the Country in light of the regional gaps in green orientation and brand equity.

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