

## Nexus between Trust, Credibility, Value and Willingness to Pay (WTP) a Price Premium: Intervening Role of Brand Equity in Herbal Industry

Peter Kwasi Oppong <sup>i</sup> , John Mensah <sup>ii</sup>  and Matilda Addae <sup>iii</sup> 

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### Abstract

Enduring brand trust, credibility, value and equity are essential drivers of customers' willingness to pay a high price for a brand which can engender a higher profit margin. The role of brand trust, credibility, value and equity in strengthening customers' willingness to pay a price premium has been extensively studied of late. However, studies on the effect of brand trust, credibility and value on willingness to pay more through the intervening role of brand equity, particularly in the herbal industry are relatively scarce. As a result, this paper's goal was to investigate the brand equity effect on the relationship between trust, credibility, value and willingness to pay a price premium in the herbal industry. Survey questionnaires were employed to gather information from 265 samples of customers through a systematic sampling strategy. The research propositions were tested using structural equation modelling. The study established that brand equity fully mediates the effect of brand credibility and perceived value on willingness to pay a price premium but partially mediates the path between brand trust and willingness to pay more in the herbal industry. The research, therefore, recommends that brand managers need to consider brand credibility, trust, value, and equity in strengthening customers' willingness to pay a price premium for medicinal herbal products in the industry.

**Keywords:** Brand Trust, Credibility, Equity, Value, WTP Price Premium, Herbal Medicine

### I. Introduction

The most enduring and valuable asset of a company is the brand it has built over the years. A brand is a distinctive name and/or symbol intended to identify and differentiate a supplier's offering from its competitors (Aaker, 1991). A strong brand offers a competitive distinctiveness that usually creates a challenge for new entrants to an industry. Healthy brands endow customers with the opportunity to interpret, process and store large quantities of product information to affirm their confidence in the brand. Brand trust, brand credibility and perceived value are important brand assets that add value to a brand (Erdem & Swait, 1998; Lassaret al., 1995) and also strengthen

<sup>i</sup> (Ph.D) Department of Marketing & Corporate Strategy, Kwame Nkrumah University Of Science & Technology, Kumasi, Ghana

 [peteropping72@gmail.com](mailto:peteropping72@gmail.com) (Corresponding Author)

 <https://orcid.org/0000-0003-2670-4295>

<sup>ii</sup> Department of Supply Chain and Information Systems, School of Business, Kwame Nkrumah University of Science and Technology, Kumasi

 [john.mensah@knust.edu.gh](mailto:john.mensah@knust.edu.gh)

 <https://orcid.org/0000-0003-3128-4483>

<sup>iii</sup> Department of Procurement and Supply Chain Management, School of Business & Management Studies, Cape Coast Technical University, Cape Coast, Ghana

 [addaematilda13@gmail.com](mailto:addaematilda13@gmail.com)

 <https://orcid.org/0000-0002-7230-4340>

consumers' willingness to pay more for a brand (Ghaleb & Kaplan, 2019; Chaudhuri & Ligas, 2016; Netemeyer et al., 2004). Increased customers' willingness to pay a high price can boost a company's fortunes by increasing its sales and hence, profitability.

The use of medicinal plants for disease prevention, treatment and maintenance is perhaps the oldest existing therapy mankind has depended on to cope with ailments. Herbal medicinal products consist of herbs, herbal materials, herbal preparations and finished herbal products that comprise parts of plants or other plant materials or both as active ingredients (WHO, 2013). In Ghana, herbal remedies often represent the most important source of health care for the population. It has been estimated that more than half of Ghanaians still include herbal medicine as a complementary or main source of therapy to combat and manage their ailments (WHO, 2019). Due to the high demand for herbal medicinal products, the number of herbal firms has increased in the last few years, resulting in keen competition in the industry (Essegbey et al., 2014). This might have given rise to reduced prices and consequently, low sales revenue in the industry. Empirical evidence indicates that favourable brand credibility, customers' brand trust, high perceived value and brand equity influence customers' WTP a price premium (Dwevidiet al., 2018; Chaudhuri & Ligas, 2016; Rambocas., 2018). It has also been asserted that increased WTP a price premium leads to high brand purchase behaviour (Netemeyer et al., 2004), which can provide a platform for herbal companies to generate huge profits to expand in the industry.

Studies show also that brand credibility (Dwivedi et al., 2018; Ghaleb & Kaplan, 2019), brand trust (Chaudhuri & Ligas, 2016; Aksoy & Özsonmez, 2019), perceived value (Li et al., 2012; Netemeyer et al., 2004) and brand equity (Rambocas et al., 2018; Buil et al., 2013) have a substantial impact on customers' willingness to pay a high price. Besides, the impact of brand credibility (Shamin & Butt, 2013; Oppong, 2020), brand trust (Kumar et al., 2013; Dib & Alhaddad, 2014), and perceived value (Buil et al., 2013; Baek et al., 2010) on brand equity has also been established in the literature. This implies that brand equity could mediate the relationship between brand credibility, brand trust, perceived value and willingness to pay more. A previous study examined the intervening role of brand identification and equity in the effect of brand attitude and e-WOM on customers' willingness to pay (Augusto & Torres, 2018). Moreover, the intervening role of brand equity and brand identity in the effect of social media marketing and e-WOM on willingness to pay more has been studied (Farzin, Sadeghi, Fattahi & Eghbal, 2021). Recently, Tamara et al. (2021) assessed the influence of customer brand trust and brand image on willingness to pay through the intervening role of customer loyalty. However, studies on brand equity's intervening role in the effect of brand credibility, trust and perceived value on WTP a price premium, particularly in the herbal industry are relatively scarce. Hence, the current paper sought to investigate the mediating role of brand equity in the effect of brand credibility, trust and perceived value on WTP a price premium in the herbal industry. Consequently, the specific objectives to address this paper's aim are to; (1) examine the influence of brand credibility, brand trust, brand equity and perceived value on WTP a price premium, (2) examine the effect of brand credibility, brand trust and perceived value on brand equity, and (3) examine the mediating role of brand equity in the relationship between brand credibility, brand trust, perceived value and WTP a price premium in the herbal industry. This paper employed Erdem and Swait (1998) and Lassar et al. (1995) CBBE models to evaluate the impact of brand credibility, perceived value and brand trust on willingness to pay a high price via the mediating role of brand equity in the herbal industry.

The rest of the paper is structured to include the relevant literature, research hypotheses, methodology, data analysis and results, and discussion. The research ends with the theoretical and practical implications, conclusion, limitations and direction for future research.

## II. Literature Review

### Customer-Based Brand Equity

A strong brand with positive equity is viewed as the most durable and important asset since it endows a company with long-term revenue. The concept of brand equity has been examined from the customer and financial perspectives (Keller, 1993). Consumer perceptions of the value of a brand are generally described as the customer-based brand equity (CBBE). In contrast, a financially-based perspective of brand equity studies the value of a brand for the purposes of accounting (*ibid*).

Aaker (1991) and Keller (1993) conceptualised brand equity in marketing from the cognitive psychology viewpoint which emphasizes customer associative memory structures. As a result, Keller (1993, p.2) described CBBE as "the differential effect of brand knowledge on consumer responses to the marketing of the brand". The author further indicated that consistent with the associative network memory framework, brand knowledge is the main source of CBBE, consisting of brand awareness and brand image. Thus, brand awareness and brand image are the major dimensions of CBBE. Aaker (1991) also defined brand equity as a set of assets and liabilities linked to the name or symbol of a brand that enhances or reduces the value of the product to the firm and its clients. The main brand assets are brand awareness, brand image, perceived quality, brand loyalty and other proprietary brand assets like patents, trademarks, etc. The author, however, emphasized that the dimensions of CBBE are brand

awareness, brand association, perceived quality and brand loyalty. Moreover, Lassar et al. (1995, p.12) noted that brand equity is concerned with “the enhancement in the perceived utility and desirability in a brand name confers on a product”. The scholars proposed that performance, social image, commitment, trust, perceived value and identification/ attachment are the key sources of CBBE.

However, Erdem and Swait (1998) conceptualized brand equity based on the signalling theory from the information economics standpoint, focusing on the imperfect and asymmetrical information organisation in the market. This standpoint regards brand credibility as the main dimension of CBBE. More specifically, the content, clarity and credibility of a brand which serves as a signal of a product’s position can enrich the perceived quality and decrease information costs and perceived risks. These outcomes, in turn, enhance consumer expected utility or CBBE. The increased expected utility also known as CBBE relates to the “value of a brand signal to consumers” (*ibid*, p.132). This paper is, therefore, guided by the dimensionality of Erdem and Swait (1998) and Lassar et al. (1995) CBBE models to explore the impact of brand credibility, perceived value and brand trust on WTP price premium via the brand equity’s intervening role in the herbal industry.

### Brand Credibility

Brand credibility is considered an important asset that supports brand choice since it decreases the perceptions of risk linked to a purchasing decision. Brand credibility measures the strength and readiness of a brand to maintain its claims consistently and comprises trustworthiness and expertise (Erdem & Swait, 2004). Consumers’ impressions of a firm’s propensity to maintain its promises are concerned with trustworthiness, whereas expertise refers to the firm’s capacity to undertake its intended promises. Keller (2013) noted that brand credibility is the degree to which a brand is perceived to be genuine. The brand’s credibility emanates from the cumulative effort of a company’s previous and current marketing programs and initiatives (Erdem & Swait, 2004). Baek and King (2011) noted that brand credibility can be developed and affected by a high level of consistency, clarity and brand investment in marketing activities and strategies over time. Past studies also indicate that brand credibility strengthens customers’ perceptions of quality, value, and purchase intentions (*ibid*). Erdem and Swait (2004) also found that brand credibility supports brand choice and the likelihood of including a brand in the consideration set.

### Brand Trust

The concept of trust is seen as crucial in establishing customer exchange relationships. Morgan and Hunt (1994, p. 33) described trust as the confidence one party places in an exchange partners’ reliability and integrity. Confidence expectations and risks, according to scholars, are both important elements of trust. As a result, when a person has evidence of the current partner’s reliability and honesty, trust is built. According to scholars, the trustworthy party should demonstrate some amount of reliability, ability, honesty, impartiality, accountability, altruism and empathy. Chaudhuri and Holbrook (2001) viewed brand trust as a customer’s propensity to rely upon a brand’s ability to accomplish its stated purpose. The researchers noted that trust is vital, especially when clients are feeling vulnerable because it minimizes perceived dangers. As a result, trusted brands are repeatedly bought and usually generate a high level of attitudinal loyalty since they are dependable, harmless, and authentic. Yague-Guillen et al. (2003) also defined brand trust as confidence in a brand’s reliability and intentions in anticipation of risk. The authors also suggested that reliability and intention as the elements of brand trust. A brand’s reliability is related to its competence and looks at the perceptions that the brand has the capacity to deliver its stated goal. The brand’s reliability is critical because it generates a sense of assurance that the brand can consistently satisfy the desires of each unique client. This can, therefore, lead to positive brand attitudes, generating repeated purchase intentions in the customer’s relationship with the brand (Morgan & Hunt, 1994). Brand intention, on the other hand, relates to the likelihood that the company will consider the buyer’s well-being if unanticipated future problems arise during consumption (Yague-Guillen et al., 2003). As a result, the brand’s intention emphasizes altruism, kindness, honesty, dependability, and justice.

### Perceived Value

In a keenly competitive market climate, a firm that delivers superior perceived value can gain an advantage over its competitors. Zeithaml (1998) explained perceived value as a subjective assessment of a product’s functional benefit compared to what is received and supplied. Thus, perceived value measures the trade-off between perceived utility and costs relating to both financial and non-financial (Kotler & Keller 2012). Extant literature suggests that customers’ perceptions of value are not limited to the functional dimension, but also aspects such as social, emotional and epistemic value (Sheth et al., 1991). However, it is contended that the widest conceptualisation of perceived value has been functional in nature, defining value as the difference between total benefits and costs (Patterson & Spreng, 1997; Sanchez-Fernandez & Iniesta-Benillo, 2007). This paper, therefore, relied on this view to measure consumers’ perceptions of the value of herbal medicinal brands.

### **Willingness to Pay Price Premium**

The WTP price premium is the amount a client is prepared to spend on a preferred brand over similar or less expensive brands in much the same quantity or size (Netemeyer et al., 2004).

Alternatively, Rambocas et al. (2018) viewed willingness to pay a high price as a customer's preparedness to pay an extra amount for a product because of its brand name. The authors emphasized that clients are prepared to pay more when they anticipate equal and higher benefits in return and hence, the extra benefits they obtain from consumption, the more likely they will pay a higher price. Extant literature reveals that WTP a price premium is one of the favorable behavioral intentions of loyal customers (Cronin et al., 2000), and can be the key summary indicator of a healthy brand (Aaker, 1996; Netemeyer et al., 2004). It has also been highlighted that a strong brand simplifies consumer-buying decisions because it reduces perceived risks by providing emotional and cognitive trust to consumers. Consequently, healthy brands serve as a signal of higher credibility and a greater degree of resistance to price competition (Rambocas et al., 2018). Empirical research also shows that satisfied customers demonstrate the desire to pay an extra amount for a preferred brand compared to a rival brand (*ibid*).

### **Research Hypotheses**

Guided by the literature review and the study's conceptual framework, the following hypothesized relationships are developed.

#### **Relationship between Brand Credibility, Brand Equity and WTP Price premium**

Brand credibility is regarded as one of the assets that enhances the value of a brand (Erdem & Swait, 1998). Brand credibility is concerned with the extent to which the brand is perceived as credible in terms of its trustworthiness, expertise and likability (Keller, 2013). It has been emphasized that favorable brand credibility creates value for consumers by decreasing the cost of information needed and uncertainty in making a purchase decision. A credible brand also has the potential to enrich the perceptions of quality which eventually, improves the expected utility of a brand (Erdem & Swait, 1998). Prior research also indicates that credibility positively impacts the overall value of a brand (Erdem & Swait, 1998; Shamin & Butt, 2013; Oppong, 2020) and directly influences customers' willingness to pay a high price (Dwivedi et al., 2018; Ghaleb & Kaplan, 2019).

Hence, the hypotheses postulated are:

- H1: Brand credibility has a positive relationship with the willingness to pay a price premium
- H2: Brand credibility has a positive relationship with overall brand equity.

#### **Relationship between Brand Equity, Trust and WTP a price premium**

Lassar et al. (1995) suggested that brand trust plays an important role in building the value of a brand. The authors view trust as the confidence consumers have in a company and its promotional activities, and the extent to which the company's actions would be in the best interest of the customers. The authors further suggested that customers' brand trust strengthens the value of a brand. The confidence consumers have in a brand can translate into loyalty and their willingness to pay a premium price for the brand. Empirical investigations also demonstrate that brand trust directly influences the overall value of a brand (Kumar et al., 2013; Dib & Alhaddad, 2014), and willingness to pay a price premium (Chaudhuri & Ligas, 2016; Aksoy & Özsönmez, 2019).

Hence, the hypotheses postulated are:

- H3: Brand trust has a positive relationship with willingness to pay a price premium
- H4: Brand trust has a positive relationship with overall brand equity

#### **Relationship Perceived Value, Brand Equity and WTP price premium**

Perceived value has been defined as the consumers' assessment of the perceived brand utility relative to its costs based on what is received and what is given up to receive it (Lassar et al., 1995). In the authors' view, a perceived value significantly contributes to the value of a brand. However, Aaker (1996) emphasized that perceived value is one of the aspects of brand association which in turn, supports brand equity. Prior studies have shown that perceived value directly impacts WTP a price premium (Chaudhuri & Ligas, 2016; Li et al., 2012; Netemeyer et al., 2004), and brand equity (Buil et al., 2013; Baek et al., 2010).

Consequently, the hypotheses proposed are:

- H5: Perceived value has a positive relationship with willingness to pay a price premium
- H6: Perceived value has a positive relationship with overall brand equity

### Brand Equity and its Intervening Role

Brand equity is related to the added value to a product provided by branding (Farquhar, 1989). According to Aaker (1992), customer satisfaction and repeated buying behavior serve as a measure of a healthy brand. The author further suggested that strong brands with high equity can boost consumers' confidence in buying decisions because they are familiar with and consider them as high quality. Similarly, Keller (2013) noted that brand equity provides the basis of competitive distinctiveness, resistance to competitors' actions and entry, charging price premium, and survival during marketing crises. Empirical studies also revealed that CBBE has a significant effect on customers' willingness to pay a high price (Augusto & Torres, 2018; Rambocas et al., 2018; Buil et al., 2013), word-of-mouth referrals, and repurchases (Rambocas et al., 2018). Besides, overall brand equity is directly affected by perceived value (Buil et al., 2013; Baek et al., 2010), brand credibility (Erdem & Swait, 1998; Shamin & Butt, 2013; Oppong, 2020), and brand trust (Kumar et al., 2013; Dib & Alhaddad, 2014).

Hence, the following hypotheses are formulated:

- H7: Overall brand equity has a positive relationship with willingness to pay a price premium
- H8: Overall brand equity mediates the relationship between perceived value and willingness to pay a price premium
- H9: Overall brand equity mediates the relationship between brand trust and willingness to pay a price premium
- H10: Overall brand equity mediates the relationship between brand credibility and willingness to pay a price premium

### III. Conceptual Model

The conceptual model in this paper depicts the important variables and their relationships in narrative and graphical form (Miles et al., 2014). In this paper, the independent variables are brand credibility, perceived value, and brand trust, the intervening variable is overall brand equity, and the outcome variable is WTP a price premium. Figure 1 exhibits the study's conceptual model which shows that perceived value, brand credibility, and brand trust are positively related to the overall value of the brand and willingness to pay a high price, while overall brand equity has a direct relationship with WTP a price premium. The conceptual model in this work depicts the important variables and their relationships in narrative and graphical form (Miles et al., 2014). In this paper, the independent variables are brand credibility, perceived value, and brand trust, the intervening variable is overall brand equity, and the outcome variable is WTP a price premium. Moreover, trust indicates the confident anticipation of the brand's reliability and intentions in the risk-prone business settings (Yague-Guillen et al., 2003). Likewise, overall brand equity measures the extent to which the consumers are willing to select between a product with a brand name and its generic version (Yoo et al., 2000). WTP a price premium also indicates the degree to which the buyer is prepared to pay an extra amount for a product because of the brand (Rambocas et al., 2018).

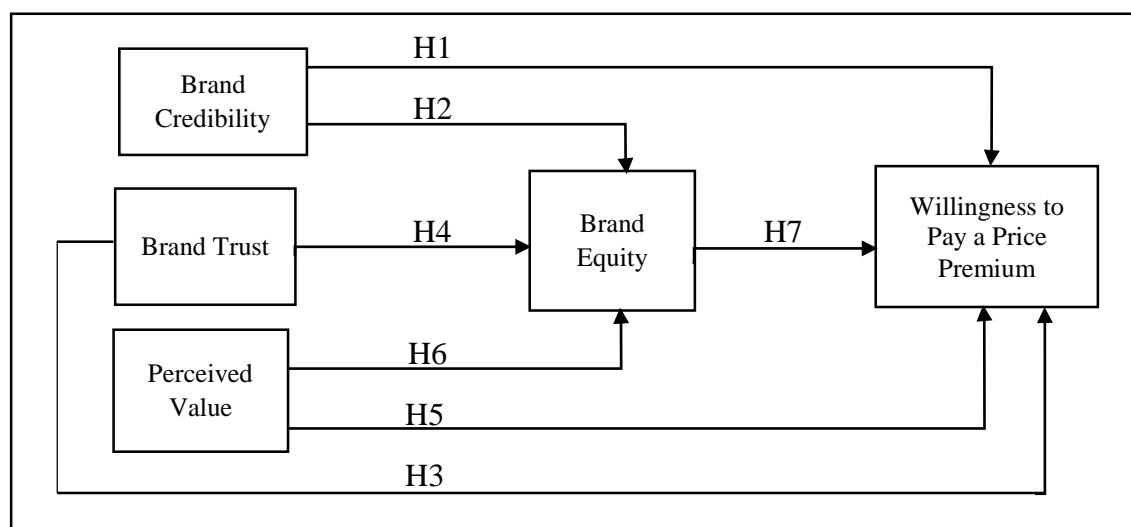


Figure 1: Conceptual Model  
Source: Designed by the Authors



## IV. Methodology

The research methodology utilised in this paper is explained below.

### Population and Sampling

Twenty-six (26) herbal stores and 854 customers constitute the study's population. The information on the herbal stores was obtained from the TMPC's data of registered herbal stores as at end of January, 2022 in the Cape Coast metropolis. The 854 customers were also sourced from the 26 herbal stores' data on the number of customers who purchase herbal medicinal products from them in a day. Two hundred and sixty-five (265) samples of customers were picked, using the sample size table developed by Krejcie and Morgan (1970).

The sample characteristics show that a greater proportion of the participants were male, between the age of 26 to 35 and had high school education. In other words, the percentage of the males was 50.7, those between the age of 26 and 35 years were 39.1, and had senior high school education were 36.5.

### Test Items Design and Data Collection Method

A five-point Likert scale anchored on 1 = strongly disagree to 5 = strongly agree was employed in the current study. The test instrument used to measure brand trust, value, credibility, overall brand equity and WTP price premium constructs were adopted from past studies. The test instruments of brand credibility were designed by Erdem and Swait (2004) and that of perceived value was developed by Sweeney and Soutar (2001). Furthermore, the measures of brand trust were adopted from Chaudhuri and Holdbrook (2001), brand equity from Yoo et al. (2000), and WTP a price premium from Zeithaml et al. (1996), Chaudhuri and Holdbrook (2001), and Netemeyer et al. (2004). Using the survey questionnaire assisted the researchers to generate data that allow for statistical analysis (Creswell, 2014).

Using a systematic sampling technique, the survey instruments were given out to the participants after shopping in front of the stores. The first participant was intercepted randomly and later on, a third of every participant was invited to respond to the questionnaire. Again, the respondents were asked whether they have attained 18 years and above before being permitted to participate in the research to eliminate minors. The sampling strategy used created an opportunity for the researcher to choose the participants without forehand knowledge of them (Malhotra et al., 2017). Although 265 questionnaires were sent out, 230 were received and 208 were usable because of invalid responses.

## V. Analysis and Results

The proposed hypotheses were statistically examined by using exploratory factor analysis (EFA) and structural equation model (SEM) through SPSS and Amos 26 respectively.

### Exploratory Factor Analysis

The EFA was carried out to determine the correlation of the test items with their purported variables. Accordingly, 21 test items were employed to conduct the EFA via principal axis factoring, employing the Promax rotation method. The outcomes of the EFA demonstrate that the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy exceeded .60 (Pallant, 2013), whilst Bartlett's Test of Sphericity is significant at  $p < .001$  (Hair et al., 2014), indicating suitability of the EFA. Besides, the outcome of the pattern matrix suggests a five-factor structure. Variable 1 is perceived value, 2 is brand credibility, 3 is brand trust, 4 is WTP a price premium and 5 is overall brand equity. In all, 20 scale items loaded on their purported constructs and one was discarded because its loading is less than .30 (Floyd & Widaman, 1995). Perceived value has 4 scale items, brand credibility has 5, brand trust has 4, WTP a price premium has 4, and overall brand equity has 3. Furthermore, the five constructs have eigenvalues above 1.0 and explained 70.30% of the analysis' cumulative variance. Likewise, the scale items' reliability of all the variables is acceptable because their Cronbach alpha is greater than .70 (Tavakol & Dennick, 2011). The coefficient alpha of perceived value is .925, brand credibility is .853, brand trust is .851, WTP a price premium is .848 and overall brand equity is .870.

### Structural Equation Modelling

As stated earlier, structural equation modelling was adopted to test the hypotheses. The SEM was utilized because it can analyze individual multiple equations simultaneously. It also provides an avenue to alter the model and produces plausible fit indexes as well as each indicator's residual errors (Hair et al., 2014; Bryne, 2016). A two-stage approach was used to perform the SEM as proposed by Bryne (2016).

## Measurement Model

The measurement model was employed to confirm the exploratory factor analysis results and to assess the construct reliability and validity. The 20 test instruments produced from the exploratory factor analysis were employed to analyze the measurement model. The standardized loadings below .50 were eliminated from the analysis (Hair et al., 2014). This was to ensure good convergent validity and as result, 15 scale items were retained. Table 2 shows that the standardized loadings of all the scale items were significant at a probability level of .001. The model fit measures were also satisfactory apart from the Chi-square statistic (CMIN= 155.623, DF = 80,  $p < .001$ ) since it is more biased towards sample size. The Normed Chi-Square statistic (CMIN/DF) = 1.945; Goodness-of-Fit Index (GFI) = .915; Root Mean Residual (RMR) = .046; Root Mean Square Error of Approximation (RMSEA) = .065; Comparative Fit Index (CFI) = .957; Tucker-Lewis Index (TLI) = .943; Incremental Fit Index (IFI) = .957, and Normed Fit Index (NFI) = .916, signaling a better model fit (Hu & Bentler, 1999; Kline, 2015; Hair et al., 2014).

Table 1: Results of Measurement Model

Constructs and their Indicators		M	SD	Standardised loadings	t-value
Perceived Value					
PPV1	X is reasonably priced	3.757	1.162	.795	— a
PPV3	X is worth the price	3.588	1.148	.840	14.088
PPV4	X is economical	3.659	1.175	.939	14.983
Brand Trust					
BT1	I trust X	4.119	.864	.776	— a
BT2	I rely on X to solve my problems	4.093	.902	.821	11.437
BT4	X is an honest brand	4.088	.778	.742	10.601
WTP Price Premium					
WTPP3	The price of this brand would have to go up quite high before I would switch to another brand	3.938	.941	.735	— a
WTPP2	I would be willing to pay a higher price for this brand than the other brands	3.827	.9481	.837	11.009
WTPP1	I would be willing to continue to buy more of this brand even if its price increases somewhat	3.850	1.026	.806	10.853
Overall Brand Equity					
BE4	If another brand is not different from X in any way, it seems smarter to purchase X	3.876	1.051	.789	— a
BE3	It makes sense to buy X instead of any other brand even if they are the same	3.889	.967	.903	13.979
BE2	Even if another brand has the same characteristics as X, I would prefer to buy X	3.761	1.130	.809	12.857
Brand Credibility					
BC4	The X's product claims are believable	4.133	.843	.718	— a
BC3	X has the ability to deliver what it promises	4.168	.878	.764	10.083
BC2	X delivers what it promises	4.195	.908	.849	10.482

Notes: X is a focal brand; M = Mean; SD = Standard Deviation; a = path parameter was set to 1, therefore t-values were not estimated; all regression weights are significant at  $p < .001$ .

## Psychometric Measures

The construct reliability was assessed by using composite reliability, while average variance extracted (AVE), and Fornell and Lacker's criterion were employed to validate the discriminant validity and convergent validity respectively (Bagozzi & Yi, 1998; Hair et al., 2014). The psychometric measures presented in Table 3 show that the AVEs of all the latent variables are above .50, which fall between .603 and .739, showing good convergent validity (Fornell & Lacker 1981). Furthermore, the analysis demonstrates that all the constructs have good discriminant validity because the average shared variance (ASV) and maximum shared variance (MSV) are less than the AVEs of the constructs (Hair et al., 2014). Likewise, the square root AVEs are greater than squared inter-construct correlations, suggesting the independence of the constructs (Bagozzi & Yi, 1988). Finally, all the latent

variables have composite reliability of above .70, showing adequate internal consistency reliability (Bagozzi & Yi, 1988). Due to the sensitive nature of Cronbach alpha to the quantity of test instruments, composite reliability is deemed slightly the best measure of construct reliability in the measurement model (Hair et al., 2014).

Table 2: Findings of Psychometric Measures

Variables	CR	ASV	MSV	AVE	BC	OBE	BT	PV	WTPP
Brand Credibility (BC)	.822	.352	.520	.603	.779*				
Overall Brand Equity (OBE)	.734	.431	.580	.698	.195	.835*			
Brand Trust (BT)	.823	.453	.580	.609	.270	.336	.780*		
Perceived Value (PV)	.895	.207	.262	.739	.020	.069	.057	.860*	
WTP a Price Premium (WTPP)	.836	.352	.474	.630	.094	.194	.225	.034	.794*

**Notes:** CR = Composite Reliability; ASV = Average Shared Variance; MSV = Maximum Shared Variance; AVE = Average Variance Extracted.

### Hypotheses Testing

The structural model was adopted to examine the proposed hypotheses in the research. In this paper, credibility, value and trust are predictors, brand equity is an intervening variable and WTP a price premium is an outcome variable. The path model's results indicate that chi-square statistic (CMIN = 211.964, df = 83, p = .000) rejected the model because it was statistically significant at  $p < 0.001$ . In the contrast, the CMIN/DF = 2.554; GFI = .889; TLI = .907; IFI = .927; CFI = .926; RMSEA = .083 are quite satisfactory. The path model's findings in Table 4 reveal that credibility and value have no direct effect on WTP a price premium at  $p < .05$ , and hence, *H1* and *H5* are rejected respectively. However, brand trust and brand equity have a positive relationship with the willingness to pay more at  $p < .05$ , confirming *H3* and *H7*. The findings further point out that credibility, trust and value have a positive relationship with brand equity at  $p < .05$ , supporting *H2*, *H4* and *H6* respectively.

Table 3: Results of Hypotheses Testing

Hypotheses	Structural Relations	Standardised Estimate	S.E.	t-value	p-value
H1	WTP Price Premium <--- Brand Credibility	.070	.066	.914	.361
H2	Brand Equity <--- Brand Credibility	.244	.078	3.447	.000
H3	WTP Price Premium <--- Brand Trust	.304	.092	3.299	.000
H4	Brand Equity <--- Brand Trust	.473	.101	6.041	.000
H5	WTP Price Premium <--- Perceived Value	.060	.052	.838	.402
H6	Brand Equity <--- Perceived Value	.155	.062	2.344	.019
H7	WTP Price Premium <--- Brand Equity	.227	.072	2.455	.014

### Mediation Model

The study's main objective was to look into the brand equity's mediating impact on the association between credibility and willingness to pay a high price (*H8*), trust and WTP a price premium (*H9*), and perceived value and WTP a price premium (*H10*). Guided by Baron and Kenny's (1986) analysis for mediation, comprising; (1) testing the mediating variable on the predictor; (2) the outcome variable on the predictor; and (3) the outcome variable on the predictor and the mediating variable. Accordingly, this paper relied on the bootstrap re-sampling technique to test the mediation model, using SPSS and Amos 26.

The findings in Table 4 point out that brand credibility has no direct effect on WTP a price premium at  $p < .05$ . The results further demonstrate that brand credibility has an indirect relationship with WTP a price premium at a  $p < .05$  significant level. These outcomes show that the overall brand equity serves as a full mediator in the path between brand credibility and willingness to pay more. Again, the analysis reveals that brand trust directly affects willingness to pay a high price at a  $p < .05$  significance level. Furthermore, the analysis points out that brand trust has an indirect relationship with willingness to pay more at  $p < .05$  level. These results suggest that overall brand equity acts as a partial mediator in the relationship between brand trust and willingness to pay more. Finally, the data analysis shows that perceived value has no direct effect on WTP a price premium at a significance level of  $p < 0.05$ . The analysis also demonstrates that perceived value has an indirect relationship with willingness to pay more at  $p < .05$ . These findings reveal that brand equity completely mediates the effect of perceived value and willingness to pay a high price.



Table 4: Summary Findings of Mediation Model

Hypotheses	Structural Relations				Direct without Mediator	Direct with Mediator	Indirect Effect
H8	Credibility	<--	Equity	<---	Price premium	.070 (.432)*	.244 (.027)**
H9	Trust	<--	Equity	<---	Price premium	.304 (.002)**	.473 (.001)**
H10	Value	<--	Equity	<---	Price premium	.060 (.437)*	.155 (.027)**

Notes: \*\* = Statistically significant @  $p < .05$ ; \* = Not statistically significant.

## VI. Discussion of Findings

The study's main objective was to explore the brand equity's mediating effect on the relationship between credibility, trust, value and willingness to pay more in the herbal industry. The study points out that credible brands have no direct influence on willingness to pay more. This outcome is in agreement with a previous study (Ghaleb & Kaplan, 2020), which revealed that credibility has no direct effect on the customers' WTP price premium. However, this outcome is in contrast with past studies (Chaudhuri & Ligas, 2016; Li et al., 2012), which demonstrate that credible brands influence customers' WTP a price premium. The study also found that brand equity is positively influenced by brand credibility in the herbal industry. This result is similar to earlier studies (Erdem & Swait, 1998; Shamin & Butt, 2013; Oppong, 2020), suggesting that credible herbal brands potentially increase their value in the industry. This implies that the customers buy herbal brands which are credible because they offer them good value. Moreover, the study revealed that brand equity directly affects customers' willingness to pay more in the herbal industry. This outcome concurs with prior studies (Augusto & Torres, 2018; Rambocas et al., 2018; Buil et al., 2013), indicating that strong brands with positive equity have a direct impact on customers' willingness to pay more in the industry. Thus, the customers are willing to pay a high price for herbal brands that command high value.

Again, consistent with earlier studies (Chaudhuri & Ligas, 2016; Aksoy & Özsonmez, 2019), the study points out that trust is significant and positively related to customers' WTP a price premium in the herbal industry. This means that the customers are willing to pay more for trusted herbal brands sold in the market. Besides, the research shows that trust significantly affects the value of herbal brands. The outcome concurs with earlier authors (Kumar et al., 2013; Dib & Alhaddad, 2014), who found that trusted brands have a positive effect on brand equity. More importantly, brand trust has a substantial impact on overall brand equity relative to brand credibility and perceived value. This implies that trusted herbal brands are not only safe and genuine but also create high value for the customers, which justifies their willingness to pay more.

Furthermore, the research indicates that increased perceived value has no impact on willingness to pay a high price in the industry. This outcome is in contrast with prior studies (Chaudhuri & Ligas, 2016; Li et al., 2012; Netemeyer et al., 2004), which reported that high perceived value positively affects customers' WTP a price premium. More so, in line with previous studies (Buil et al., 2013; Baek et al., 2010), the perceived value was found to have a strong effect on the value of herbal brands. This indicates that a favourable perceived value potentially increases the value of the herbal brands, which in turn, strengthens the customers' WTP a high price. Again, this paper shows that brand equity acts as a full mediator in the effect of credibility and perceived value on willingness to pay more and a partial mediator in the path between brand trust on willingness to pay more in the herbal industry. This implies that the positive brand equity partly reinforces the effect of credibility and value on customers' willingness to pay more, and fully supports the effect of brand trust on willingness to pay more in the herbal industry.

## VII. Conclusion

As stated earlier, the study's goal was to explore the brand equity's intervening role in the path between credibility, trust, value and willingness to pay more in the herbal industry in Ghana. The study found that both brand credibility and perceived value have no significant and positive relationship with customers' willingness to pay more in the herbal industry. However, brand trust and brand equity contribute positively to the customers' willingness to pay a high price in the herbal industry. The study, therefore, confirmed that brand trust and brand equity are notable sources of customers' willingness to pay a high price in the herbal industry.

The research's findings also point out that credibility, trust and perceived value significantly enhance the brand equity in the herbal industry. Hence, the paper confirmed that credibility, perceived value and trust are key drivers of brand equity. This result further confirmed that brand equity is a multi-dimensional variable as it has been conceptualized in the brand management literature. The research also revealed that brand equity fully contributes to the effect of credibility and value on WTP a price premium but partially to the effect of brand trust on willingness to pay more. Accordingly, this paper established that increased brand credibility, trust and value strengthen customers' willingness to pay more through the intervening role of equity in the herbal industry.

### Practical Implications

The study has some policy implications for managers of herbal companies in Ghana. The study confirmed that brand credibility, brand trust and perceived value have a positive influence on brand equity, which in turn, supports WTP price premium. More importantly, it was established that brand trust has the greatest impact on brand equity in relation to brand credibility and perceived value. Hence, any effort made by managers of herbal companies to build credible brands, trusted and provide value for money will create value for the customers and thereby, enhance their WTP a high price. More so, channeling more marketing efforts to develop brand trust can have a substantial influence on the value of the herbal brand's equity relative to its credibility and perceived value.

The research also established that brand trust contributes to strengthening the customers' WTP price premium for the herbal brands. This implies that the managers of herbal companies need to develop brands that can be trusted by the customers to strengthen their WTP a high price for these brands. Although brand credibility and perceived value did not have any impact on the customers' WTP a price premium, creating brands that are reliable and offer value for money by the management of the herbal companies can increase their commitment to pay more for the brands. It was also established that brand equity fully supports the influence of brand credibility and perceived value on WTP a high price but partially enhances the impact of brand trust on the customers' WTP a high price. Recognizing the critical position of brand equity in the impact of credibility, trust and value on WTP a price premium, the managers of herbal companies should consider brand equity in deciding to develop brand trust, brand credibility and perceived value to strengthen the customers' WTP a price premium in the industry.

### Theoretical Implications

The study does not only contribute to enhancing the managerial policies of the herbal companies but also extends the existing brand management theory. The importance of trust, credibility, value and brand equity to WTP a price premium has been well-documented in the literature, but studies of this kind in the herbal industry are lacking. Therefore, this study contributes to expanding the CBBE theory in the herbal industry.

Moreover, although the essential role of trust, credibility, value and brand equity in building customers' WTP a price premium has been well-established in the literature, studies on the mediating role of brand equity in the relationship between brand trust, brand credibility, perceived value and WTP a price premium are relatively scarce. Hence, the study extends the existing CBBE theory. Again, a new research model providing a fresh understanding and insight into the interactions among brand trust, credibility, value, equity and WTP price premium was developed. This model is robust because its reliability and validity were rigorously examined and therefore, can be applied in future brand management research.

### Limitations and Direction for Future Research

There are some limitations of this paper that need to be addressed in a similar future to enrich the generalization of its findings. Herbal medicines retailed in the in-store market were selected. Future research should consider those that are sold online to generate a holistic view of the brand's credibility, trust, value and customers' willingness to pay price premium in the herbal industry in Ghana. Moreover, herbal medicines encompass herbal herbs, herbal materials, herbal preparations and finished herbal products. The current paper considered only the finished packaged medicinal herbal products. Future studies should investigate all aspects of medicinal herbal products. Furthermore, the current research measured brand credibility, trust, value and customers' willingness to pay price premium in the Cape Coast metropolis. Future research should collect data from other parts of the country and beyond to enhance the generalisation of this study.

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