

**The Influence of Customer Equity Drivers on Customer
Loyalty: a B2B Perspective**

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Abstract

This research aims to investigate the effects of the drivers of customer equity on customer loyalty in marketing research services in Egypt - B2B context. The contribution of this research comes as a result of a rare published literature that studied and tested the impact of customer Equity- drivers on customer loyalty in a B2B context; moreover, many published researches have studied these relations in a B2C context, While our research works to measure and investigate these relations in marketing research services - B2b context, especially in the Egyptian market. a quantitative methodology has been followed; cross-sectional design, based on a non-random sample, a149 valid questionnaires have been collected from - business companies-

marketing and marketing research managers who have dealt with marketing research Agencies such as AC Nielsen, TNS, GFK, and others. The findings expose that customer equity and its drivers have a positive, direct, and significant impact on customer loyalty in marketing research services in Egypt.

Key words; Customer Equity, Value Equity, Relationship Equity, Brand Equity, Marketing Research, B2B Context.

ملخص عربي

هدفت الدراسة الحالية الي التعرف علي تأثير أبعاد قيمة العملاء Customer Equity؛ قيمة العملاء، وقيمة العلامة، والعلاقات مع العملاء) علي ولاء العملاء بالتطبيق في سوق خدمات بحوث التسويق في مصر - سياق سوق الأعمال B2B market، تأتي مساهمة هذا البحث كنتيجة لندرة البحوث السابق التي تختبر هذه العلاقات في سوق الأعمال خصوصا في مصر. تم إتباع المنهج الكمي للدراسة، وإعتمدت الدراسة الميدانية لهذا البحث علي عينة غير إحصائية ميسرة حجمها ١٤٩ مفردة صالحة من - شركات الأعمال - مديري التسويق وبحوث التسويق الذين تعاملوا مع وكالات أبحاث التسويق مثل AC Nielsen و TNS و GFK وغيرها . وكشفت النتائج أن قيمة وأبعادها لها تأثير إيجابي ومباشر علي ولاء العملاء في سوق خدمات بحوث التسويق في مصر.

الكلمات الرئيسية: قيمة العملاء ، قيمة العملاء ، قيمة العلامة التجارية ، قيمة علاقات العملاء ، بحوث التسويق ، سوق الأعمال

1. Introduction

Customer equity is considered one of the core aspects in marketing at scientific and business firm levels because the financial corporate value depends on the value drivers of marketing; hence customer equity is the main marketing asset and driver of value. Customer equity is the total value of the business's customer asset; it includes the entire profit generated from customers throughout a long-term relationship with the business, rather than just the profit from each transaction (Kumar and George, 2007), in addition to it refers to the total customer lifetime value of an corporate or business, that can be done through a systematic value equity approach (Razzaq et al.,2017; Maas and Judith, 2000. p. 106-107). Customer equity is consisting of a three primary parts with crucial drivers: value, brand and Relationship equity (Kim, 2012, Leone et al,2006). Value equity is a critical element and cornerstone between business firms, it is an objective assessment of the benefit of the brand that customers obtain compared to their perceptions. value equity involves a three main aspects: quality, price, and convenience, and therefore value excellence is an essential component in building long-term relationships with customers, in addition to value equity can be determined by the rewards a customer provides to obtain a product (Lemon et al., 2001). While Brand Equity expresses about intangible value of services and products that

is difficult to measure it by quantitative methods.(Segarra-Moliner and Moliner-Tena, 2016; Aaker, 1992). Brand equity includes main five dimensions, which are linked to the brand name and symbol; brand awareness, perceived quality, loyalty, associations, and other assets such as; trademarks, relationships, and etc. (Alkaya and Taşkın, 2017; Aaker, 1995), On the other hand; relationship equity involves all of Efforts and activities that businesses adopt in order to build good relationships with their customers, these efforts include going to beyond more customer value and brand equity. In addition to that, it is a constant tendency and adherence of consumers that goes beyond an objective evaluation of the brand, moreover; It also extends to establishing emotional and good relationships with customers, linking those relationships to important events in the lives of customers (Kim et al., 2020; Lemon et al., 2001, Kim and Kim, 2012, Kim et al., 2018, Kim et al., 2020) and (Cho and Chiu, 2021). Customer loyalty consider a key marketing objective because, of it a main source of sustainable cash flow of business, in addition to It observed from the previous studies show that acquiring new customers is more expensive than retaining existing customers (Zia, 2020). loyalty is customers' deeply steady commitment to continually repurchase or sponsor a favorite product in the future.(Zia, 2020; Ladhari et al., 2011, Baumann et al., 2011), (Teichmann, 2021).

The majority of the previous literature reveals that; all customer equity drivers have a positive effect on customer loyalty in B2B context, such as researches by Ramaseshan et al.(2013), and Ou et al.(2017), in addition to that conducted in the end-user final market, such as studies by Zhang et al.(2010), and Bhadra and Rego (2019). Despite; the importance of customer equity on loyalty, the literature review reveals a rare of studies that measure and test these relations in a B2B context moreover; it hasn't been investigated before in the marketing research industry, especially in the Egyptian context, which elaborates the research gap. by this token; This research aims to examine the effects of the drivers of customer equity on customer loyalty in marketing research services in Egypt - B2B context. By this token; the research has depended on quantitative methodology, and cross-sectional design, from the population of business firms in Egypt that buy and use marketing research services from research agencies located in Egypt such as; AC Nielsen, TNS, GFK and other. Data were collected from a non-random sample that combines a convenience and snowball sample from a marketing and marketing research manager who works in a business company and has been dealt with a marketing research Agency. 159 surveys in total were received, and they were examined, 149 valid questionnaires have finally been analyzed to test hypotheses. the findings expose that customer equity and its

drivers having a positive, direct, and significant impact on customer loyalty in marketing research services in Egypt.

2. Literature Review

2.1 Customer Equity

The concepts of customer equity are varied across many studies in marketing, not because it is a complex phenomenon, but because it is a multidimensional concept. many of researches discussed a several approaches to address customer equity concept, while some literatures has been focused on the customer lifetime value-model to calculate the total customer equity, other literatures focused on components of customer equity components (Abbas and Enaba, 2023; Alkaya and Taşkın,2017; Bruhn, Schoenmueller, and Schäfer, 2012, Lemon and Rust, 2001). Customer equity is the total value of the business's customer asset; it includes the entire profit generated from customers throughout a long-term relationship with the business, rather than just the profit from each transaction (Kumar and George, 2007), in addition to it refers to the total customer life time value of an corporate or business, that can be done through a systematic value equity approach(), (Razzaq et al.,2017), on other hand; Customer equity is the total summed discounted or present value of the company's current and potential customers (Segarra-Moliner and Moliner-Tena, 2016; Lemon and Zeithaml, 2004,). Rust, Zeithaml, and Lemon (2000, 2004). As per their point of view,

customer equity is consisting of three main mechanisms with key drivers: value, brand and Relationship equity (Kim, 2012, Leone et al.,2006), also, Customer equity management is a comprehensive approach that works to increase the lifetime of customer value by considering the customer as a strategic marketing asset (Bhadra and Rego, 2019).

2.2 Brand Equity:

Previous literature dealt with defining brand equity from two perspectives. The first is literature that deals with brand equity from a financial perspective, as it enhances the brand-economic value of the company, in addition to the consumer perspective, which highlights the value of the brand to the consumer (Pina and Dias,2021). Although famously Acker (1991) and Keller (1993) laid out the foundations of their brand equity concept differently, they both base their theory on the consumer perspective. Brand Equity is the difference in customer behavior and perception when he purchases and consumes the same product from specific brand and without a brand, moreover; it expresses about intangible value of services and products that is difficult to measure it by quantitative methods (Segarra-Moliner and Moliner-Tena, 2016; Asker, 1992). brand equity is constructed through image and meaning to achieve the core mission (Lemon et al., 2001), it works to attract consumers and lets them to assess the brands or compensation value by their perception and recognition of

brands, in addition to it makes customers re-purchasing continuously(Wang et al.,2016). On the other hand; brand equity is concerned with meanings and images, so the brand has key functions such as; attracting customers to the business and reminding customers of products and services from a specific firm (Lemon et al., 2001), also. It's the value-added that goods and services receive. The difference in consumer choice between a focus branded product and an unbranded product due to the same level of product features can be seen in the way consumers think, feel, and act concerning a brand, as well as the prices, market share, and profitability required by a firm's brand (Kotlerand Keller, 2009).

2.3 Value equity:

Value equity plays a central role in marketing, It is a critical element and cornerstone between business firms and their customers. Although the customer value definition is highly debated, and there is no communal agreement as to what a customer value (Payne et al., 2017, Kim et al., 2020) The dynamic nature of customer value has been the main cause of conceptual confusion in business and management customer value research, the previous literature found that the customer can perceive value consciously, unconsciously, or pre-consciously (Wang, et al., 2016); thus, a customer perceives value differently. Customer value is a complex concept with numerous meanings and connotations. As a result, there are

differences in the qualities of consumer values. Understanding and capturing customer expectations, designing and delivering targeted customer experiences, and assessing and managing customer evaluations are at the core of the customer value logic (Paananen and Seppänen, 2013), It can take the form of a decline in sacrifice and advantage (determined and expressed either rationally or intuitively); or it can accumulate over time from any of those. (Holbrook, 2005), in addition to it is 1) interactive; 2) relativistic: 1) differs between people; 2) depends on the situation; 3) embodies preferences; and 4) is not tied to the thing itself but somewhat to the pertinent consumption experience (Pynnönen et al., 2011). Customer value equity is an objective assessment of the benefit of the brand that customers obtain compared to their perceptions, and therefore it reflects the relative assessments and opinions of target customers towards services and products. based on that; the customer perceived value considers a subjective variable, this leads to that customers evaluate the same product in different ways, therefore this subjectivity add emotional and social dimensions, which affect customer preferences and choices (Leone et al., 2006, Sánchez et al., 2006, Vogel et al., 2008; Kim, et al., 2020).

2.4 Relationship equity:

The concept of relationship equity is considered a broad scope, that It is considered the processes

that help to improve the relationship with customers as well as the equity that has been built up with them. The theoretical roots of 'Relationship equity lie in building experience-based relationships with current and potential clients through extensive participation in the activities initiated by the organization, which include emotional, cognitive, and behavioral elements that refer to the experiential and emotional accumulation of the client and business firms(Cheng et al.,2019). Relationship equity is the emotional commitment, and tendency of the customer, to adhere to a specific brand, at a level beyond the objective evaluation of the brand on the part of the customer (Rust et al.,2001, Hennig-Thurau et al., 2002).

Relationship equity also means a sense of distributive justice in terms of benefits and a sense of well-being, and that the customer is aware of what is due, and the feeling and awareness of the benefits and entitlements may be immediate, which makes the customer feel treated fairly (Low and Johnston,2006) . The main drivers of relationship equity include customer loyalty programs, direct customer communication (customer care and support, website interactions-etc.), customer communities, and the knowledge that the company and customer have developed about each other over time. Relationship equity defined as how customers evaluate perceived relationship value during communications of the firm with its customers to present its

product or services, (Wang et al, 2016, Alkaya and Taşkın, 2017). moreover; It also extends to establishing emotional and good relationships with customers, linking those relationships to important events in the lives of customers. On other words; It not just like loyalty programs, it is a transformation to affinity programs, which re-innovate the structural connections between business and customers in ways outperforms competitors (Kim et al., 2020; Lemon et al. ,2001, Kim and Kim, 2012, Kim, 2018),(Cho and Chiu,2021).

2.5 Customer Loyalty

Customer loyalty is considered a key marketing objective because, it is a main source of sustainable cash flow of business, in addition to It was detected from previous literatures that loyal customers are more cost-effective than new customer acquisition(Zia, 2020). loyalty is customers' deeply steady commitment to continually repurchase or sponsor a favorite product in the future.(Zia, 2020 ; Ladhari et al., 2011, Baumann et al., 2011), (Teichmann, 2021). The likelihood of a customer coming back and their willingness to collaborate with the business are what drive many companies to create loyalty programs that incentivize repeat business (Kimura, 2021; Bowen and Shoemaker,1998), Furthermore, according to a meta-review of earlier studies, loyalty is defined as "a group of attitudes associated with sequences of buying behaviors that steadily favor one business firm over competing firms" (Watson et al., 2015).

Conversely, Oliver (1999) proposes that a consumer's loyalty develops through four stages, which are cognitive, affective, conative, and action, and they are developed in that order (Ghorbanzadeh and Rahehagh, 2020). Conversely, the recently, frequency, and monetary value model allows for the prediction of customer loyalty and, in addition, of customer equity and customer lifetime value (Fader and Hardie, 2007). It is possible that those declared goals will not materialize into purchases. The actual purchase data is therefore a more reliable metric, as a result, this research focuses on the area where actual behavior is reflected and can be converted into actual repurchases (Bhadra and Rego, 2019).

3. Conceptual Framework and hypotheses development

Zhang et al. (2010); examine the influences of customer equity drivers on loyalty, in Korea markets of shoes, the results show that value, relationship equity, and brand equity definitely influence customers' loyalty toward sports shoes brands, the three paths have significant at the .05 level. Ou et al. (2017); discovered that, for all services industries and firms, CEDs and loyalty intentions were positively correlated. In addition to; the study exposes that; value equity and relationship equity have significant influence on customer loyalty through the mediating effect of customer trust in a B2B framework. moreover; As per (Segarra-Moliner and Moliner-Tena, 2016); the Client seen esteem has emphatically impacts

intentional devotion in Spanish media transmission advertise , whereas; the esteem value totally impact customers' devotion of sports shoes, in expansion to (Ramadhan and Yolanda Masnita Siagian,2019); their research showed that customer perceived value have weighty impact on Loyalty, in FMCG market. Bhadra and Rego (2019); value equity and brand equity have the strongest relationships with customer loyalty, according to the results, while relationship equity has little to no relationship with customer loyalty. so, it expected a relationship between customer equity drivers and loyalty. Thus it is expected that:

H (1). Customer equity has positive effect on customer Loyalty.

Juntunen et al(2011); the results reveal that; loyalty is neither a element of nor an outcome of brand equity. Instead, brand image results in loyalty in the B2B market of logistics services. Shuang et al (2022); Results proved that brand equity has significant positive impact on customer loyalty in fashion accessories among Chinese youth. Another study by Chang, and Tseng (2005); brand equity has significant effects on customer retention and acquisition, in Taiwanese multilevel firms. brand equity in B2B marketing for the pump and compressor industry has a highly significant relationship with both behavioral and attitudinal loyalty(Abdolvand and Rahpeima,2013). The B2B FMCG Industrial Market's high

path coefficient value supports the notion that distributor loyalty is positively impacted by brand equity (Kurniawan et al., 2020). So, it is expected that:

H(2). Brand equity has positive impact on customer loyalty.

Customer value has a major impact on customer loyalty, and value equity has a correspondingly large impact on customer acquisition and retention in Taiwanese multilevel firms. In the B2B food and beverage industry, customer value has a major impact on customer loyalty (Sudiyono et al., 2022). Accordingly, B2B customer loyalty is positively impacted by the perceived value of customer companies in a statistically significant. (Yuan et al., 2020), According to Lam et al. (2004); in the context of business-to-business (B2B) services, customer value positively impacts the loyalty dimensions when customer satisfaction is lacking. Customers' loyalty in the B2B software service market is positively impacted by their perception of value (Abdolvandand Norouzi, 2012). According to Musonen et al. (2016); loyalty in industrial markets is strongly influenced by perceived value. found that in industrial business-to-business (B2B) relationships, the direct impact of perceived value on loyalty is statistically significant (Hänninen and Karjaluoto, 2017). The results confirm that customer value has a direct and significant effect on loyalty in the freight services, B2B context. (Justavino-Castillo et al., 2023), In the Internet Service provider

market, the B2B business partner loyalty is positively and significantly impacted by the value of business partners, but the effect is negative and minor (Mayasari et al., 2023), value equity in Taiwanese multilevel firms has a significant impact on customer acquisition and retention and acquisition (Chang and Tseng, 2005). therefore it expected that:

H (3). value equity has positive impact on customer loyalty.

Relationship equity is very important to retain customers, many of the literature has investigated the relationship between it and customer loyalty; Khan et al. (2020); company reputation and customer relationship management have a positive and significant impact on customer loyalty, the findings of the research refer to a connection between customer relationship marketing and customer loyalty (Suryadi et al., 2022). Relationship equity is major in determining brand loyalty because of the mediating effect of brand equity and the moderating effect of value equity (Cuong et al., 2020), Relationship Equity has a positive influence and impact on customer loyalty in the Indonesian beauty products brand's social media activity (Wibowo and Hartono, 2023). relationship equity had a stronger effect on customer loyalty in the Dutch than in China country for both the bank and supermarket customers, (Zhang et al., 2014). On the other side, Bhadra and Rego (2019); that relationship equity has no or

nominal relationship with customer loyalty of retail outlets for consumer durables. Hence:

H(4). relationship equity has positive impact on customer loyalty.

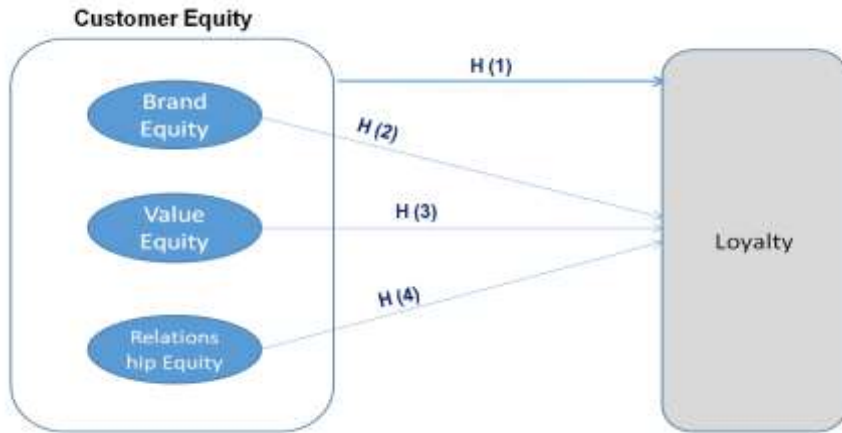


Figure 1: Illustrates the proposed relationships that Research investigates

4. Research Methodology and Design

4.1 Sample and data collection

Research has depended on quantitative methodology, cross-sectional design, from the population of business firms in Egypt that buy and use marketing research services from research agencies located in Egypt such as; AC Nielsen, TNS, GFK and other. The Sampling unite was companies in Egypt in any sector as a customer for marketing research agencies which represented in “marketing manager or marketing

research manager” in business companies. data were collected from a non-random sample that combines a convenience and snowball sample from a marketing and marketing research manager who works in a business company and has been dealt with a marketing research Agency. Researchers depend on direct interviews (face to face) through trade fairs, telephone contact, and the use of assistive tools such as whats-app to send a copy of the survey to collect data from the targeted sample. In addition to preparing an electronic copy and sent the link to the survey to marketers’ groups on Facebook and Linked In. 257 managers of marketing and research in Egyptian business organizations were interviewed. 159 surveys in total were received, and they were examined for anomalies and incomplete information. 11 cases-basically outliers-were eliminated. 159 valid questionnaires have finally been analyzed. The following table (1) shows the sample breakdown according to industry;

Table (1): sample Description per industry

Customers Per Industry	Weight%
FMCG	24%
Financial consultancy	16%
Industrial products	11%
Real-estate	8%
Furniture	7%
Healthcare	6%
Durable Goods	5%
Packaging and printing	5%

Pharmaceutical and cosmetics	4%
Tourism	3%
Agro-development	3%
education	3%
Retails	3%
Chemicals	2%

4.2 Measurement:

Brand equity was operationalized by adapting measures of Ramaseshan et al.(2013); Grisaffe and Kumar,1998, Dodds et al., 1991, Sirdeshmukh et al.,2002). Value Equity measures adopted developed based on scales have been developed by (Ramaseshan et al., 2013; Verhoef, 2003, Keller, 2003), while the relationship equity measures adopted developed based on scales have been developed by(Ramaseshan et al., 2013; Vogel et al., 2008, De Wulf et al., 2001, Hennig-Thurau et al.,2002, Gwinner et al., 1998; Hennig-Thurau et al., 2002), in addition to the customer loyalty measures created based on the measures have been adopted by Ramaseshan et al., 2013; Zeithaml et al., 1996, Podsakoff et al., 2003). the previous measures were used in a business-to-business context.

A detailed questionnaire with two sections was designed to collect data. The pretested questionnaire consisted of 17 statements representing customers' attitudes toward the marketing research agencies. Respondents were asked to rate each statement regarding brand (4 statements), value (4

statements), relationship equity (4 statements), and customer loyalty (5 statements) on a Likert scale ranging from 1 = “strongly disagree” to 5 = to rate “completely agree”.

5. Results

5.1 Sampling Adequacy

The sample size is essential for a valid factor solution, a rigid factor structure, and a stable component pattern. Therefore, before doing the factor analysis, the Kaiser–Meyer–Olkin measure of sampling adequacy (KMO) was devised to determine the extent to which the sample yields a trustworthy factor solution.

Table (2): Sampling adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.835
Bartlett's Test of Sphericity	Approx. Chi-Square	2113.001
	df	190
	Sig.	0.000

The KMO statistic values vary between 0 and 1. More values close to 0 indicate dispersion in the patent of correlation. While values close to 1 indicate that the correlation pattern is converged, the factor analysis is appropriate (Field, 2005). The values between .7 and .8 are good, those between .8 and .9 are great, and those above .9 are perfect (Hutcheson and Sofroniou, 1999). Kaiser (1974); stated that the sample size is

adequate when the Value of KMO is above .5. The results of Table (2) show that $KMO = 0.835$, which means the research sample is a great to test research hypotheses, according to (Hutcheson and Sofroniou, 1999), indicating that the sample size is adequate to run factor analysis.

5.1.1 Reliability and validity

A reliability analysis was conducted, and since every coefficient is greater than point 0.70, the composite reliability of all the constructs is based on Cronbach's alpha. Strong internal consistency between the items of each construct is demonstrated by the fact that all observed CA and CR are greater than 0.747. Furthermore, all constructs have explained variances greater than the acceptable level of 50 percent, with the minimum observed explained variance being 51.9 percent. Based on Cronbach's alpha (CA), composite reliability (CR), and average variance extracted (AVE), all constructs are valid and reliable.

Table (3): reliability and validity

Construct	CA	CR	AVE
brand	0.783	0.79	0.697
Value	0.747	0.763	0.666
Relationship	0.874	0.876	0.727
Equity	0.895	0.9	0.519
loyalty	0.842	0.849	0.678

Convergent Validity and divergent Validity

Table (4): Convergent Validity and divergent Validity

	Brand	Value	Relation	Loyalty
Brand_1	0.83	0.33	0.441	0.503
Brand_2	0.849	0.483	0.61	0.454
Brand_3	0.825	0.404	0.488	0.363
Value_1	0.403	0.822	0.518	0.309
Value_2	0.438	0.885	0.633	0.611
Value_4	0.359	0.735	0.473	0.414
Relation_1	0.553	0.532	0.834	0.457
Relation_2	0.509	0.567	0.842	0.547
Relation_3	0.561	0.571	0.905	0.51
Relation_4	0.493	0.608	0.827	0.56
Loyalty_1	0.521	0.534	0.51	0.827
Loyalty_2	0.415	0.363	0.444	0.801
Loyalty_3	0.373	0.499	0.532	0.854
Loyalty_4	0.426	0.406	0.508	0.81

Table (4) presents convergent and divergent (discriminant) validities based on a correlation matrix analysis. The correlation coefficients between the items and test results make up the elements of this matrix. Convergent Validity has a correlation coefficient with the score of their own dimension greater than 0.700. While the Divergent Validity has a correlation coefficient with the score of their own dimension greater than those computed with other scores.

Discriminant Validity using the HTMT_{0,9}

Table (5): First and Second-order discriminant validity by the HTMT_{0,9}

	Brand	Equity	Loyalty	Relation	Value
Brand					
Equity	0.964				
Loyalty	0.65	0.756			
Relation	0.742	1.037	0.706		
Value	0.634	1.011	0.68	0.823	

Discriminant Validity using the Fornell-Larker

Table (6): First and Second-order discriminant validity by the Fornell-Larker

	Brand	Equity	Loyalty	Relation	Value
Brand	0.835				
Equity	0.8	0.72			
Loyalty	0.526	0.664	0.823		
Relation	0.621	0.927	0.608	0.853	
Value	0.492	0.825	0.553	0.668	0.816

5.1.2 Des Descriptive Statistics

Table(7):Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max	p1	p99	Skew.	Kurt.
Brand 1	149	3.852	0.933	1	5	2	5	-0.355	2.427
Brand 2	149	3.698	0.906	1	5	1	5	-0.683	3.648
Brand 3	149	3.772	0.959	1	5	2	5	-0.591	2.655
Brand	149	3.774	0.779	1.333	5	1.667	5	-0.902	3.356
Value 1	149	3.819	0.923	1	5	1	5	-0.772	3.983
Value 2	149	3.799	0.923	1	5	1	5	-0.939	4.184
Value 4	149	3.785	0.81	1	5	2	5	-0.892	3.865
Value	149	3.801	0.724	1	5	1.333	5	-1.331	5.266
Relation 1	149	3.597	0.986	1	5	1	5	-0.57	3.388

Relation 2	149	3.638	0.988	1	5	1	5	-0.702	3.506
Relation 3	149	3.544	0.881	1	5	1	5	-0.816	3.803
Relation 4	149	3.772	0.994	1	5	1	5	-0.815	3.428
Relation	149	3.638	0.819	1.25	5	1.25	5	-1.219	4.558
Customer Equity	149	3.728	0.668	1.3	4.8	1.4	4.7	-1.44	5.565
Loyalty 1	149	3.832	0.989	1	5	1	5	-1.215	4.747
Loyalty 2	149	3.725	1.065	1	5	1	5	-0.548	2.705
Loyalty 3	149	3.732	0.956	1	5	1	5	-0.281	2.54
Loyalty 4	149	3.544	1.023	1	5	1	5	-0.669	3.034
Loyalty	149	3.708	0.83	1.25	5	1.5	5	-1.005	3.793

Table (7) shows the sample tends to strongly accept the item (brand_1) as it has the highest mean of (3.852) "Marketing research company is a strong brand ", followed by (Loyalty_1) "I have said positive things about the research company to others" with a mean of (3.832). In contrast, the lowest mean was recorded for the item (Relation_3) and (Loyalty_4) "I feel loyal towards marketing research company ", "My company will continue doing business with this marketing research company with the same plan or an upgraded plan " as it has the lowest mean of (3.544). All research items, dimensions, and constructs show a positive perception with a score greater than 3. Moreover, assumptions of normality are violated since the skewness and kurtosis scores for all measurement items and constructs are not zero. However, such violations are common in social science. Therefore, applying the parametric technique to test hypotheses is still possible only if the scores of skewness for

item and constructs range from -3 to +3 and kurtosis scores range from -10 to +10, the minimum and maximum observed skewness and kurtosis -1.331 to -0.281 and 2.201 to 5.565 respectively. This is applicable for samples that exceed 30 cases (Elliott and Woodward, 2007).

5.1.3 Hypothesis testing

Table (8): hypotheses testing

Path	Coefficient	t-value	P values	Results
Brand -> loyalty	0.234	2.533	0.006	Supported
Value -> loyalty	0.277	3.881	0	Supported
Relation -> loyalty	0.282	3.105	0.001	Supported
Equity -> loyalty	0.663	10.157	0	Supported
*** p<0.01, ** p<0.05, * p<0.1				

After the measurement model has been assessed, hypothesis testing is conducted using the bootstrapping procedure to test the significance of the hypothesized associations. The p-value should be less than 0.05, and the t-value should be higher than 1.96 to accept a specific impact of the proposed exogenous variables on the endogenous variable. In conclusion, the customer equity dimensions positively and directly impact customer loyalty, in addition to the customer equity overall having a positive, direct, and significant impact on customer loyalty in marketing research services in Egypt.

Regarding the first hypothesis, the results showed a positive effect of brand equity on customer loyalty. In the marketing research services, the path-coefficient value is 0.234, which

indicates that any change in the degree of brand equity by one degree will lead to an increase in customer loyalty by about 0.234, While the second hypothesis, results showed a positive effect of value equity on customer loyalty in the marketing research services, the path-coefficient value is 0.277, which indicates that any change in the degree of value equity by one degree will lead to an increase in customer loyalty by 0.277. Additionally, for the third hypothesis, there is a positive effect of relationship equity on customer loyalty in the marketing research services; the path-coefficient value is 0.282, which indicates that any change in the degree of brand equity by one degree will lead to an increase in customer loyalty by 0.282. Finally, the customer equity drivers have a positive, direct, and significant impact on customer loyalty the path-coefficient value is 0.663, this means that a one-degree change in customer equity will result in a 0.663 increase in customer loyalty.

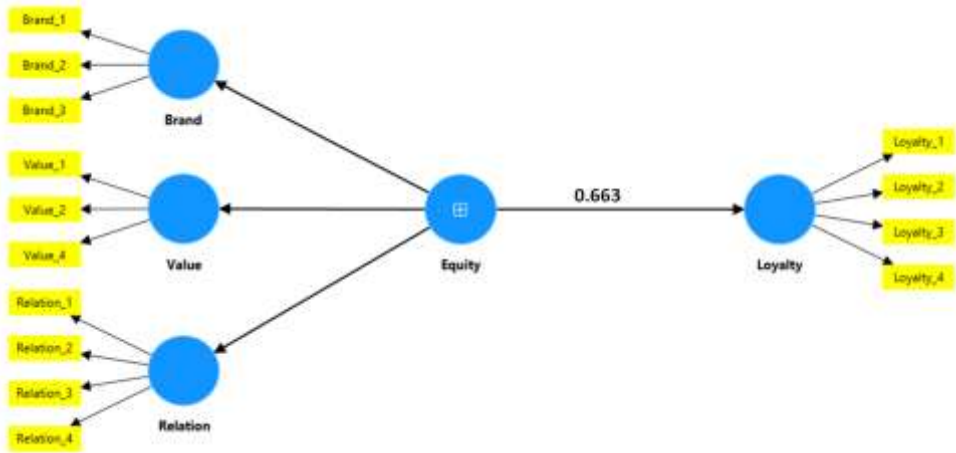


Figure 2: customer equity on customer loyalty- the path-coefficient.

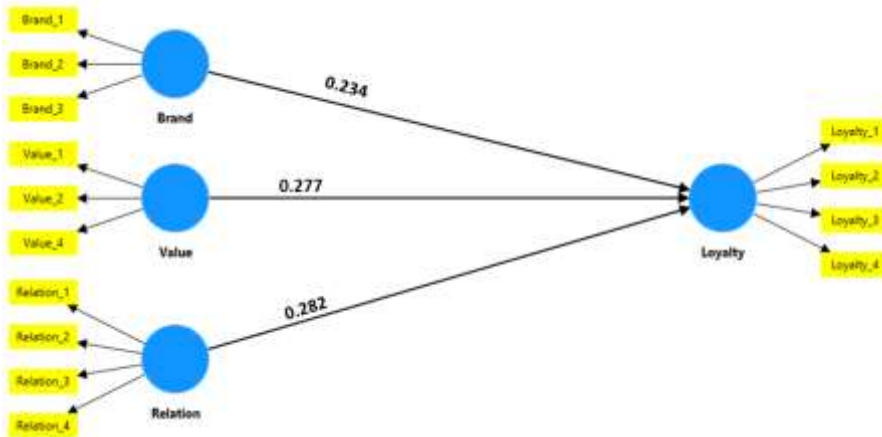


Figure 3: customer equity drivers on customer loyalty- the path-coefficient.

6. Discussion

Our research has investigated the impact of Value equity, brand equity, and relationship equity—the three drivers of customer equity—on customer loyalty in marketing research services - B2B context- Egyptian market. The results reveal that all customer equity drivers have a positive impact on customer loyalty in marketing research services- B2B context. These findings are consistent with previous studies that studied customer equity in different contexts, proving the same relationship and positive effect between customer equity-drivers and loyalty in the business-business market, such as studies by Ramaseshan et al.(2013), and Ou et al.(2017), in addition to at the level of the end-user final market, such as studies by Zhang et al.(2010), and Tena(2016), while partially consistent with Bhadra and Rego (2019).

The first result supports that brand equity has a significant effect on customer loyalty, this result is consistent with the results of Chang and Tseng (2005), Abdolvand and Rahpeima,(2013), and Kurniawan et al.(2020), While it does not agree with the study by Juntunen et al.(2011). while the second result supports that value equity has a significant effect on customer loyalty, this result is consistent with the results of Yuan et al.(2020), Lam et al. (2004), Abdolvand and Norouzi (2012), Musonen et al.(2016), and Justavino-Castillo et al.(2023) in the B2b market, in addition to also with results by

Masnitasiagian(2019), Sudiyono et al. (2022),and Hänninen and Karjaluoto (2017) in the end-user market, on the other hand it does not agree with the study by Mayasari et al.(2023). Finally; the third results supports that relationship equity has a significant effect on customer loyalty, this result is regular with the results of (Suryadi et al., 2022), (Cuong et al., 2020), Wibowo and Hartono (2023), and Zhang et al.(2014), but it does not regular with the study of Bhadra and Rego (2019).

7. Limitation and future research

Although the results of our study are important at the scientific level due to the lack of published studies examining the impact of customer equity drivers on loyalty in business market contexts- B2b, several limitations should be noted. The study focuses on the industry for marketing research services in the Egyptian market only. This may affect the generalizability across the general spectrum at the level of the business services market in general, and also at the level of the product market within the business market- B2b. Hence; It is important to study the same variables- customer equity drivers in the business market across different industries. On the other hand, the measures that used are an extension of the previous marketing scholars, and rely on the quantitative method to test hypotheses. Therefore, it may be useful in future studies to begin a qualitative phase to develop the measures and explore other new variables related to customer equity and loyalty. In

addition to the above, there may also be an opportunity to test these hypotheses by developing seventh-interval scale measures, which may be more sensitive in studying the phenomenon and may open the way for exploration and different results in the Egyptian market.

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