Brand Equity Role in Customers Planned Behavior in the Egyptian E-Banking Sector

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Abstract

The purpose of this paper is to investigate the impact of Brand Equity dimensions on customers planned behavior of the e-banking services in the Egyptian banking sector. Therefore, a questionnaire had been adopted and directed to customers of e-banking services in the Egyptian context. Results revealed that there is a significant positive effect of all brand equity dimensions; Awareness, Association, Loyalty and perceived service quality on Subjective Norms, while there had been a significant effect of Awareness, Association and perceived service quality on Attitude. Finally, a significant positive effect was found for Awareness and Association only on Perceived Behavior Control.

1 Introduction

Brand equity is important to the fortunes of a company, product, and market. As it is noticed, many things contribute to brand equity, and there are many ways to measure it in marketing. Brand equity refers to the value of known brand about positive or negative mental neutral thoughts, beliefs and emotional associations. It is what gets in your mind to recognize all branded images and phrases, and the ability of customers to recognized of logos or other visual elements, and brand language. The most popular measure of brand equity is, Brand Awareness, Brand Association, Brand Association, loyalty, and Perceived Service Quality.

Brand equity is regarded as a very important concept in business practice in academic research because marketers can gain competitive advantage through successful brands. The competitive advantage of firms that have brands with increase equity includes the opportunity to successful spread, flexibility, promotional pressures, and making of barriers to competitive entry against competitors. A sign of the importance of recognizing brands are the premium asset valuation that they obtain. For example, 90% of the total price of \$220m paid by Cadbury-Schweppes for the Hires and Crush product lines of Procter & Gamble is attributed to brand assets. Similarly, main corporations such as Canada-Dry and Colgate-Palmolive have created the position of brand equity manager to build high brand positions for customers (Lassar et al., 1995).

Internet banking is a new type of information system that uses the innovative resources of the Internet and WWW to enable customers to effect financial activities in virtual space (Shih and Fang, 2004).Liao et al. (1999) define the virtual bank as a "non-branch bank" and the providing of services via

electronic media such as automated teller machines (ATMs), telephone, personal computers and the Internet. One advantage of banks going online is the potential savings in the cost of maintaining a traditional branch network. Although Internet banking may help banks to decrease costs, there are important observance, such as, the extent to which retail bank customers adopt new forms of banking, that is, the factors that influence intention toward adopting another form of banking and adoption differences between different types of banking. These observances are very important to the customers who plan and promote new forms of banking in the current competitive market.

Researches on the impact brand equity have increase in recent years, it hasa clear positive impact on a company's financial performance. This topic refers to test the relationships between brand concepts and brand equity, while exploring the roles of emotional attachment and customer commitment. The research determines the effect of brand concept on the customer–brand relationship and brand performance. Additionally, it examines how customer mediates the relationship between brand concept and brand equity–brand relationships such as emotional attachment and commitment. The results empirically demonstrate is important to contribution of the three brand concepts of brand equity (Jeon, 2017).

This research analyzes how consumers perceptions of their traditional bank influence their decision and behavior to be adopted with the services offered by the same and similar banks on the internet. The data required and collected in this research were gathered by ways and means of a personal survey with customers of various banks totaling 421, which take their services through online banking services.

2 Literature Review

Research interest in brand equity and branding has been an important subject of research in the marketing area. The brand equity construct refers to the additional value a brand name and value proposition gives to a product or service. Brand equity empowers companies to lower costs of distribution, increased effectiveness in marketing communication, and spread growth opportunities from brand extensions and licenses (Rios and Riquelme, 2008). So, this research is to determine if the traditional approach to measuring brand equity applies to online banking services or not. Motameni and Shahrokhi (1998) found that since late 1980s there has been a high acquisition in some brands, He determined to discuss marketing and finance views of brand equity, and their relationships. Also, discussed the changed measurements of brand equity. And a comprehensive model of global brand equity, He estimated the brand equity more accurately and determined the sources of the equity that used.

Washburn et al. (2000) investigated that the Co-branding is the most popular technique that the marketers use in try to transfer the positive partner brand to newly formed co-brand. They examine the effects and impact of co-branding on the brand equity of the co-branded and the partner brands before and after product trial. It showed that co-branding is a win-win strategy for both irrespective of the main and original brands according to customers how they are perceived high or low brand equity. low equity brands more benefit from co-branding, high equity brands are not disparaged even when paired with a low equity partner. Co-branding strategies be effective in exploiting a product

performance advantage or with a new product created by an unfamiliar brand name.

Krishnan and Hartline (2001)investigated that brand equity considering as intangible goods and it has a large of attention, The main understanding of brand equity specially for services has to get more attention., the differences in brand equity associated with search-dominant, experience-dominant, and credence-dominant services hasn't beexamined ,so the aim to make test on brand equity and measure how is it more important for services than for tangible goods, the results showed that brand equity is more important for tangible goods than for services.

Leiser, (2004) defined brand equity according today's view and how to be more simplistic and anyone could understand it so easily, it was viewed as a symbol of business or brand logo or slogan or advertising message. It's more normally to defined it as a group of expectations that evoked from past and present experience with a company or products. It's simply about how customers think and feel and touch about the corporate or product of what comes from the brand. If the expectations, relations, and experiences are positive, results showed that positive expectation about the brand helped it to grow market share and profitability.

Delgado-Ballester and Munuera-Aleman (2005) analyzed the importance of brand trust in propose to develop brand equity. specially, the relationships network brand trust in brand equity. They found that brand trust is accumulated from past experience with the brand, and it is also affected positively and directly with brand loyalty, which have a high positive relationship with brand equity. Furthermore, the results suggest that, although brand trust does not play a full mediating role as suggested by Morgan and Hunt, it contributes to a better

explanation of brand equity. The collected data based on a survey in a region in the south-eastern part of Spain, about 271surveys.

Papasolomou and Vrontis (2006) in their study started from the premise that there are critical issues that should drive brand success. They seek to investigate the way the UK retail banking industry has sought to build and sustain a strong brand by launching an internal marketing (IM) programmed throughout its branch network. Also, attention is driven on the types of branding in the financial services industry and the relationship between IM and branding. The study was under dimension of qualitative and experimental in nature, since the aim was to explore branch managers and employee's views and experiences of IM within the UK retail bank trade. Data were collected by carrying out in-depth qualitative interviews with organizational members working in different positions within 35 business units that represented seven different UK retail banking organizations. The qualitative data were analyzed by using the grounded theory approach developed by Strauss and Corbin in 1990.

The data analysis collected were found is a four core themes as main of IM, namely: internal customers training and education; quality standards and rewards systems. These four themes are passed on a constant main in order to construct a certain type of organizational reality, one that sets the basis on building and increase a strong corporate brand by changing the organizational culture to one, which is more customers service and customer-oriented (Papasolomou and Vrontis,2006).

Flavián et al. (2006)collected data and gathered by personal survey with customers of various of banks about 633, which allocate their services by traditional channels as well as on the internet. This data analysed factors that influence consumers' decision to work with the same bank via the internet are

trust, incomes, age, sex, education and employment on the adoption of the financial services offered by a traditional bank on the internet. The results showed that consumer trust in a traditional bank.

Chen (2007) investigated the impact of parallel importation on brand equity in high and low product involvement measures. Authorized goods and gray-marketed goods (High involvement and low involvement) between subjects' investigational design is utilized consumer electronics and highlighter pens are examined. The results of this study show that source channel authorized goods versus gray goods has a strong impact on brand equity, consumers are most disturbed about the differentiation in perceived quality between gray goods and authorized goods, sourcing channel stimuli are found to have more a strong influential effect than product involvement on consumer estimations of brand equity.

AbuShanab and Pearson (2007) stated in their research that many business analysts overestimated the impact of internet technologies when they were first introduced, we now know that the presence of these technologies has and will continue to shape business practices for years to come, so the purpose of this research is to investigate the key determinants of the adoption of Internet banking in Jordan. The study also refers to prove the suitability of the Unified Theory of Acceptance and Use of Technology (UTAUT), within the context of Internet banking. The conclusion indicated that UTAUT provides a strong foundation for future technology acceptance research. The three main predictors give to this study a high degree of performance expectancy, effort expectancy, and social influence were significant and explained a lot amount of the adjustment in forecasting a customer's intention to adopt Internet banking. The

results also indicate that gender moderated the relationships between the three independent variables and the dependent variable behavioral intention.

Partial support for the application of the offline brand equity theoretical framework was provided based on brand awareness, brand associations, brand perceived services quality and loyalty for online companies. This study support and stress on the view that a consumer's perceived sense of value proposition resulting from a transaction with an online business develops loyalty, brand-trust relationship and brand awareness in devious way contribute to creating brand equity and value proposition through their influence on loyalty. Loyalty is the most important source of brand equity because of its direct influence and main role in creating brand equity (Rios and Riquelme, 2008).

The consequences that brand alliances have on a new and unknown online brand was analyzed in terms of attitude to its virtual web site, brand trust, brand equity, value proposition and consumer's willingness to deal with online transactions a sample of 367 subjects participated in an online experience of buying a travel package from an unknown travel agency, which is applied with other known and un known brands. The information provided by the participants in different online designs of brand alliances was used to test the theoretical model proposed in the paper. This model was analyzed and compared with other alternative models using conventional maximum likelihood estimation techniques. The conclusion showed that attitude toward brand alliance represents a strategic marketing opportunity to help an unknown online brand to reach a high degree of the first impression from consumers in terms of brand trust, loyalty and attitude toward the brand's virtual web site. Online brand trust doesn't exert a fully mediated role between the brand alliance's evaluation and

subsequent consumers' reactions to the online brand (Delgado-Ballester and Hernández - Espallardo, 2008).

Wallace and Chernatony (2009) conducted their research to explore managers and employees' views about service damage brand the front line in retail banking. The current literature showed the role of the employee in service delivery, and advocates the farming of brand ambassador's employees who support the service brand through their performance. There also exist saboteur's employees who aggressively work against the brand, and there is a shortage of works exploring the nature of this group. And much of the extant works explores service performance from the perspective of the consumer and little is known about employees' views. This study seeks to present managers' and employees' views about service performance, and service disruption. The study findings from in-depth interviews with bank managers, and a survey of employees reveals damage drivers in the "job for life" banking environment in Ireland. This study showed most of employee fear, overwork and compliance demands as issues which influence job disappointment, consumer dislike, employee insecurity, and non-goodwill for the company.

After the sale of a primary product, firms often have the opportunity to sell ancillary products or services in support of the primary and main brand. These additions or services will be offered in a general or in a branded form. The aim of this topic is to study the demand for add-on services in the mobile communications industry and to detail a methodology that can be employed to make this estimated. A field experimental design approach using two-brand manipulations, four-price points and six content applications were employed and analyzed. The study was flexible at a mall intercept facility in a major urban center. Interviews with 389 mobile phone users between the ages 18-31 were

conducted and measurement. Results showed and spread of brand equity theory into the context of ancillary product sales and demonstrate that branded ancillary services can command a price premium and are less sensitive to price increases than unbranded alternatives (Baker et al., 2010).

Kimpakon and Tocquer (2010) aim to measure the brand equity of service firms specially in luxury hotelsusing a customer perspective, to define factors that influence and predict customers' brands relationships and to determine the relation between service brand equity and employee brand commitment. They collected data from two surveys to accomplish the research objectives. The first survey objective was to determine and measure brand equity using 250 samples from international customers of five-star hotels in Bangkok. The second survey objective was to collect information and dataaccording to employee brand commitment in each selected hotel250 employees are selected. According to data showed that hotels in the same class have different brand equity and that brand diversity and brand trust are the factors that have the main influence and impact on customer brand relationships. Perceived service quality and associations related to hotel is the main services are not belonging to brand relationships. Hotel that have high brands equity already have a stronger and powerful level of employee brand commitment than low hotel brands equity.

The potential to provide customers with information about experience and credence qualities in advance of purchase has resulted in spread recognition of the significance of brands in relation to consumer choice in the service sector and customer word of mouth. What is of particular significance in this process is brand equity – the value that the consumer describes to the brand. The main objective of this research is to make academic understanding of brand equity in the higher education (HE) sector and explore the impact for management

repetition. The assumption provides support for the proposed conceptual model, with image-related to measure of brand equity being far more important than awareness-related determinants. Although there is a growing body of research, which analyzed brand equity from the consumer perspective in relation to physical goods, compare with a few studies have measure brand equity in a service context (Mourad et al., 2011).

The expansion of the brand was investigated, and its role within the firm, is mainly related to the firm's culture. Also determined difficulties and opportunities formed by the cultural context of firms wishing to disseminate and embed a set of brand values. They also present an involvement model of brand values implementation, development and outlines changes required to implement brand values. Used data were conducted by interviews with20 managers within two leading banking firms in Ireland and two leading grocery retailers in Ireland (Wallace et al., 2011).

In recent years, the banking industry has been facing strong competitive pressures resulting from the integration and globalization of financial markets, and the increase and wider use of e-commerce to deliver services and create new products. In a high degree of response to these global trends, a number of major European banks pursued a universal banking strategy by expanding and invest in their business operations to become global investors and players with a single global branding strategy. So, this topic is to examine bank brand equity from consumer perspectives by comparing the consumer-based brand equity (CBBE) represent of local and global banks in Turkey and determines if and how there are different across three types of banks state, private, and foreign. At the end It was found that the overall CBBE, perceived quality, brand image and brand loyalty were higher for private banks than for state and foreign banks.

Organizational association was increase for state banks, then by private banks, and decrease for foreign banks. Foreign banks marked the lowest in perceived quality, brand loyalty (Pinar et al., 2012).

Buil et al. (2013) study is to examine the effects and impact of this construct on consumers' responses using information and data from two European Assumptions were tested and analyzed using structural equation modeling. Measurement invariance and stability of the model across the two national samples was measured using multi group analysis. Results suggest that brand equity dimensions inter-relate. Brand awareness has positive impacts on perceived quality and brand associations. Brand associations have strong influence brand loyalty. Finally, the main attributes of overall brand equity are perceived quality, brand associations and brand loyalty. the general framework planned is found to be empirically strong across the studied countries. Only a few changes are observed.

Small and medium sized enterprises are going to increase to communicating and interacting with stakeholders through digital media and virtual online programmers. So, the main reason of this study is to exploring the owner-managers' attitudes toward the technological innovation, and it determine their perceived use and ease of digital media for stakeholder engagement. Final result that the SME owner-managers perceived the effectiveness and cooperative of digital media to involve with marketplace stakeholders. And the analysis reported positive relationships between the technical innovation and the SMEs' perceived usefulness and helpful of digital media for communication purposes. The results also revealed that young owner- managers from large SMEs were more likely to utilize digital media than their smaller counterparts (Curran, 2000).

Customer-based brand equity happens as soon as customers are aware with the brand and grasp favorable, strong and unique brand associations in memory (Keller, 1993). Aaker (1996b) has stated that BE is a set of assets and liabilities. Five brand equity assets – brand loyalty, brand awareness, perceived quality, brand association and other proprietary brand assets – are fundamentals of value creation. This study uses these five brand equity groupings from Aaker (1991), as they are the most acceptable to-date. As brand equity is a multidimensional thought (Aaker, 1991), there was a variety of ways measuring the dimensions for branding – some include brand loyalty and brand association (Shocker and Weitz, 1988). There is also brand knowledge, which comprises of brand awareness and brand image (Keller, 1993). Furthermore, You et al. (2000) have suggested that perceived quality, brand loyalty and brand awareness have a strong brand association. Among the five brand equity assets, it is very difficult to operate a consumer's observation of brand association in an experiment (Pappu et al., 2006). Furthermore, other proprietary brand assets, such as patents, are not easy to assess. Therefore, the current study uses brand awareness, brand loyalty, brand association and perceived service quality as the dimensions of BE.

Buil et al. (2013)using structural equation modeling (SEM) measured invariance and stability of the model between the two national samples was evaluated using multigroup confirmatory factor analysis. They found that brand awareness positively impacts on perceived quality and brand associations. And brand loyalty is mostly influenced by brand associations. Finally, perceived quality, brand associations and brand loyalty are the main dimensions of overall brand equity. Also support the positive impact of brand equity on consumers' responses and satisfaction.

Keisidou et al. (2013)collected data by a survey carried out in the banking sector of Greece to collect information concerning customer satisfaction and loyalty, and the financial data of the banks were collected from their annual financial statements. They used structural equation modelling was used to test the hypotheses. They found that customer satisfaction and loyalty have a significant impact on the financial performance of banks, while the lasting factors have shown unprecedented results.

Rambocas et al. (2014)investigated the interceding role of customer satisfaction in brand equity relationships. also showed the important role of brand affinity, customer satisfaction, and service experience in explanation brand equity. They collected data from 315 banking customers in Trinidad and Tobago through personally structured questionnaires and analysed with Structural Equation Modelling (SEM).Kucherov and Samokish, (2016) stated a quantitative approach to employer brand evaluation. And how did they effect on corporate's brand equity. It takes in consider the core target groups of the employer brand and could be able to integrate with it. The data collected based on the model of employer brand equity by B. Minchington, the core employer brand assets (employer brand awareness, associations, loyalty, perceived employment experience) for three large companies are measured and the total employer brand equity strength is evaluated.

Amoako et al. (2017) stated in their research and found an important positive relationship between advertising effectiveness and brand preference. and this impact and results a significant positive relationship between brand preference and customer loyalty. They collected suitable sampling and data technique about 600 respondent's employers to select a cross-section of customers from the universal banks currently operating in Ghana. They used

structural equation modeling technique of PLS to test the nature of relationships in the research hypotheses. Mbama and Ezepue (2018)investigated the main factors which determine customer experience are service quality, functional quality, perceived value (PV), employee-customer engagement, perceived usability and perceived risk. There is a significant relationship among customer experience, satisfaction and loyalty, which is related to FP. The data collected by a survey of UK bank customers' perceptions and use of banks' financial reports to obtain FP ratios, and used structural equation modelling; then used analysis of variance tests to explore research hypotheses on the research.

Loureiro and Sarmento(2018)investigated that the value for money are the most relevant indicators in shaping the overall bank experience and services also pleasure is the most positive emotion that improves the perception of brand equity. The data collected based on the method of Walsh and Beatty (2007) with completed and usable questionnaires. They collected 211 respondents then selected a sample of them. After removing some inconsistencies, a final result of samples contained of 205 usable survey participants (male: 58% and female: 42%).

## 3 Research Methodology

In order to test the research hypotheses that underpin this study, the research methodology adopted is based on several issues as illustrated below: **Unit of** Analysis: which is the step of gathering of the data collected for the purpose of the data analysis process. It is represented in customers of the Egyptian banking sector using online banking services in Egypt.

Population and Sample: The target population for this research is considered as the total number of all customers using the online banking services in the Egyptian banking sector. Since obtaining data about all members of a population is not available and very difficult (Fowler, 2013), the sampling frame for this research could not be identified and accordingly a probability sampling is not obtained. Therefore, a convenient sampling technique was used as respondents were selected from customers of the Egyptian e-banking services who accepted to respond to the questionnaire. A total number of 421 were considered in the study after excluding questionnaire with missing responses.

Data Collection: the data collection process is handled through the development of a questionnaire that allows for the measurement of customers' perceptions and past experiences with brands. The adoption of this data collection method was due to the need to measure the focal constructs of the model, as well as the extensive use of survey methodology in previous studies examining branding equity. The questionnaire is adopted from previous studies, where a total number of 21 statements were defined for the research variables. The questionnaire was adopted from the studies of Jalilvand et al. (2014), Rios and Riquelme (2008), Pinar et al. (2012); Alhassan et al. (2018).

Research Framework and Hypotheses: The proposed framework was introduced in Figure 1, where it could be observed that Awareness, Association, Loyalty and Perceived Service Quality were considered as the independent variables representing Brand Equity dimensions. Perceived Behavior Control, Attitude and Subjective Norms are considered as the dependent variables representing customers planned behavior dimensions.
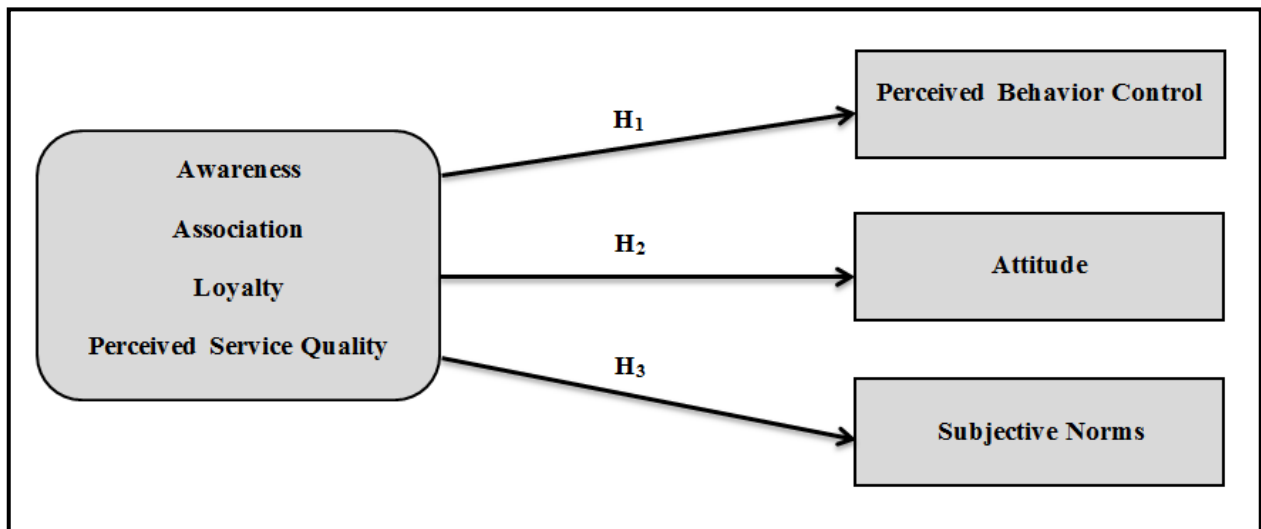
Figure 1: Research Framework

Accordingly, the research hypotheses could be formulated as follows:

H_1: There is a significant influence of Brand Equity dimensions on Perceived Behavior Control.

H_2: There is a significant influence of Brand Equity dimensions on Attitude.

H_3: There is a significant influence of Brand Equity dimensions on Subjective Norms.

Research Variables Measurement: the research variables are defined in Table 1 with their measurement scale, Awareness, Association, Loyalty and Perceived Service Quality were considered as the independent variables; Perceived Behavior Control, Attitude and Subjective Norms are considered as the dependent variables.

Table 1: Research Variables Measurement Scale

Research Variable	Description	Measurement Scale
Awareness (Jalilvand et al., 2014; Rios and Riquelme, 2008)	Independent Variable	I have heard of E- Banking Services.
		Some characteristics about E- Banking Services come quickly to my mind.
		I can recognize E- Banking Services among other competing online businesses
Association (Rios and Riquelme, 2008; Pinar et al., 2012)	Independent Variable	I prefer E- Banking Services because price deals are frequently offered.
		It feels safe to conduct transactions in E- Banking Services.
		E- Banking Services is known for providing the best quality service
Loyalty (Jalilvand et al., 2014; Pinar et al., 2012; Rios and Riquelme, 2008)	Independent Variable	I would like to refer to E- Banking Services again in the future.
		I intend to recommend E- Banking Services to my family and friends.
		E- Banking Services is my first choice.
Perceived Service Quality (Jalilvand et al., 2014; Pinar et al., 2012)	Independent Variable	There is a high level of cleanliness at E- Banking Services.
		There is a high quality of financial E- Banking Services.
		E- Banking Services is one of the preferred transactions I want to refer.
Perceived Behavior Control (Jalilvand et al., 2014)	Dependent Variable	How much control do you have over referring E- Banking Services again?
		If I chose to, I would be able to refer to E- Banking Services again.
		I will repeat E- Banking Services again.
Attitude (Alhassan et al., 2018; Jalilvand et al., 2014)	Dependent Variable	In my opinion, E- Banking Services is a good activity.
		I think that E- Banking Services at home is interesting task.
		If everything goes as I think, I will plan to refer to E- Banking Services in the future.
Subjective Norms (Jalilvand et al., 2014)	Dependent Variable	Important people in my life say I ought to refer to E- Banking Services again.
		My Family think I should refer to E- Banking Services again.
		People around pressure me to refer to E- Banking Services.

The following section will investigate the research hypotheses proposed above using correlation analysis and Structural Equation Modeling (SEM). Thus, both; SPSS and AMOS statistical packages – versions 24.

4 Results and Findings

As a preliminary step for analysis, the researcher displays the descriptive statistics for the respondents' personal profile. The frequency in this research has been analyzed and several observations were considered. As shown in Table 2, the sample under study comprised 58% Males and 42% Females. As for the education level of the sample, 43% had bachelor degree, 19% were postgraduate, 24% had master degree, and 14% had doctoral degree. Also, the majority of the sample belonged to the "31 to 40" age group with a percentage of 51% of the total sample while the "41 to 50" age group was 32%, "Less than 30" was 15% and "More than 50" was 3%.

Table 2: Respondents Personal Profile

	Frequency	Percent	Total
Gender			
Male	244	58%	**421**
Female	177	42%	
Education			
Bachelor Degree	179	43%	**421**
Post Graduate	82	19%	
Master Degree	100	24%	
Doctoral Degree	60	14%	
Age			
Less than 30	63	15%	**421**
31 to 40	213	51%	
41 to 50	133	32%	
More than 50	12	3%	

The collected data cannot be used until validity and reliability tests are applied and give the result that this data is valid and reliable. At this point data could be used for testing the research hypotheses. The questionnaire statements are designed in which it can measure what it expected to measure correctly, this what is called validity (Sekaran and Bougie, 2010). To measure the factor validity, the average variance extracted (AVE) is used to represent the average community for each latent factor. This measure should exceed 0.5 to state adequate validity (Hair et al., 1998). Then Factor loading for each item is used to examine validity, in which it should be 0.4 minimum (Chin, 1998).

To examine reliability, each factor is measured using a group of statements, the consistency between these statements refers to reliability in which it can be examined by Cronbach's Alpha, the most common used test of reliability. The range of Alpha coefficient comes between 0 to 1, the higher the score the higher the reliability. The adequate reliability should be referred by Alpha coefficients exceeding 0.7(Nunnally, 1978). Validity testing and reliability of the data used for this research were displayed in Table 3.

By studying the variables in the model which consists of Awareness, Association, Loyalty, Perceived Service Quality, Perceived Behavior Control, Attitude and Subjective Norms, it was found that all variables exceed the 50% in the AVE indicator and also alpha coefficients are more than 0.7.

Table 3: Data Validation

Variables	KMO	AVE	Cronbach's Alpha	Items	Item Loading
Awareness	.667	65.467%	.736	Items1	.640
				Items2	.725
				Items3	.599
Association	.703	75.314%	.835	Items1	.784
				Items2	.803
				Items3	.673
Loyalty	.500	80.891%	.761	Items1	.809
				Items2	.809
				Items3	Deleted
Perceived Service Quality	.697	70.576%	.791	Items1	.697
				Items2	.753
				Items3	.667
Perceived Behavior Control	.500	78.511%	.726	Items1	Deleted
				Items2	.785
				Items3	.785
Attitude	.679	64.158%	.718	Items1	.642
				Items2	.619
				Items3	.664
Subjective Norms	.661	64.456%	.723	Items1	.640
				Items2	.716
				Items3	.577

Descriptive analysis provides summary statistics about the research variables, including the mean, median, variance and standard deviations. Table 4

shows the descriptive analysis for the research variables. It was observed that the mean of Awareness, Association, Loyalty, Perceived Service Quality, Perceived Behavior Control, Attitude and Subjective Norms are 3.8907, 3.7363, 4.0000, 3.9596, 4.0903, 3.6485and 3.6746respectively.

Table 4: Descriptive Analysis for Research variables

Research Variables	N	Mean	Std. Deviation	Variance	Frequency Percent				
					1	2	3	4	5
Awareness	421	3.8907	.86873	.755	1	23	109	176	112
Association	421	3.7363	.71670	.514		10	148	206	57
Loyalty	421	4.0000	.79881	.638	4	10	80	215	112
Perceived Service Quality	421	3.9596	.79330	.629	1	11	102	197	110
Perceived Behavior Control	421	4.0903	.82024	.673	5	8	70	199	139
Attitude	421	3.6485	.76528	.586	1	24	145	203	48
Subjective Norms	421	3.6746	.86247	.744	5	31	124	197	64

Testing the Effect of Customer Brand Equity Dimension son Perceived Behavior Control

Table 5 shows the correlation matrix between independent variables Awareness, Association, Loyalty, Perceived Service Quality and Perceived Behavior Control. There is a significant positive correlation between Awareness, Association, Loyalty, Perceived Service Quality and Perceived Behavior Control, as corresponding P-valuesare less than 0.05 and r>0. It was observed that the values of Pearson's correlation for the research variables; Awareness, Association, Loyalty, Perceived Service Quality and Perceived Behavior Control, are 0.305**, 0.275**, 0.164** and 0.211** respectively.

Table 5: Correlation Matrix between Customer Brand Equity Antecedents and Perceived Behavior Control

			1	2	3	4	5
1.	Awareness	Pearson Correlation	1				
		Sig. (2-tailed)					
		N	421				
2.	Association	Pearson Correlation	$.256^{**}$	1			
		Sig. (2-tailed)	.000				
		N	421	421			
3.	Loyalty	Pearson Correlation	$.425^{**}$	$.220^{**}$	1		
		Sig. (2-tailed)	.000	.000			
		N	421	421	421		
4.	Perceived Service Quality	Pearson Correlation	$.574^{**}$	$.304^{**}$	$.421^{**}$	1	
		Sig. (2-tailed)	.000	.000	.000		
		N	421	421	421	421	
5.	Perceived Behavior Control	Pearson Correlation	$.305^{**}$	$.275^{**}$	$.164^{**}$	$.211^{**}$	1
		Sig. (2-tailed)	.000	.001	.001	.000	
		N	421	421	421	421	421

Table 6 shows the multiple regression analysis of the influence of Awareness, Association, Loyalty and Perceived Service Quality on Perceived Behavior Control. it was found that P-values of the variables; Awareness and Association are 0.000 and 0.000, implying a positive significant impact of Awareness and Association on Perceived Behavior Control($\beta = 0.231$ and 0.240). however, there is an insignificant effect of Loyalty and Perceived Service Quality on Perceived Behavior Control as the P-values are more than 0.05 an the coefficients are 0.013 and 0.001 respectively. Also, the R square is 0.135 which means that the model explains 13.5% of the variation in Perceived Behavior Control.

Table 6: Regression Model of Customer Brand Equity Dimensions on Perceived Behavior Control

Research Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R-Square
	B	Std. Error	Beta			
(Constant)	2.238	.264		8.484	.000	
Awareness	.231	.054	.245	4.249	.000	.135
Association	.240	.055	.210	4.343	.000	
Loyalty	.013	.053	.013	.243	.808	
Perceived Service Quality	.001	.060	.001	.014	.989	

Thus, the hypothesis that Awareness, Association, Loyalty and Perceived Service Quality has a significant impact on Perceived Behavior Control was partially supported.

Testing the Effect of Customer Brand Equity Dimensions on Attitude

Table 7 shows the correlation matrix between independent variables Awareness, Association, Loyalty, Perceived Service Quality and Attitude. There is a significant positive correlation between Awareness, Association, Loyalty, Perceived Service Quality and Attitude, as corresponding P-values are less than 0.05 and r>0. It was observed that the values of Pearson's correlation for the research variables; Awareness, Association, Loyalty, Perceived Service Quality and Attitude, are 0.393**, 0.325**, 0.238** and 0.357** respectively.

Table 7: Customer Brand Equity Dimensions and Attitude

			1	2	3	4	5
1.	Awareness	Pearson Correlation	1				
		Sig. (2-tailed)					
		N	421				
2.	Association	Pearson Correlation	.256**	1			
		Sig. (2-tailed)	.000				
		N	421	421			
3.	Loyalty	Pearson Correlation	.425**	.220**	1		
		Sig. (2-tailed)	.000	.000			
		N	421	421	421		
4.	Perceived Service Quality	Pearson Correlation	.574**	.304**	.421**	1	
		Sig. (2-tailed)	.000	.000	.000		
		N	421	421	421	421	
5.	Attitude	Pearson Correlation	.393**	.325**	.238**	.357**	1
		Sig. (2-tailed)	.000	.001	.001	.000	
		N	421	421	421	421	421

Table 8 shows the multiple regression analysis of the influence of Awareness, Association, Loyalty and Perceived Service Quality on Attitude. it was found that P-values of the variables; Awareness, Association and Perceived Service Quality are 0.000 0.000 and 0.012, implying a positive significant impact of Awareness, Association and Perceived Service Quality on Attitude (β = 0.218, 0.229 and 0.134). however, there is an insignificant effect of Loyalty on Attitude as the P-value is more than 0.05 and the coefficient is 0.026. Also, the R square is 0.223 which means that the model explains 22.3% of the variation in Attitude.

Table 8: Regression Model of Customer Brand EquityDimensions on Attitude

Research Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R-Square
	B	Std. Error	Beta			
(Constant)	1.314	.233		5.633	.000	
Awareness	.218	.048	.248	4.532	.000	.223
Association	.229	.049	.214	4.679	.000	
Loyalty	.026	.047	.027	.541	.589	
Perceived Service Quality	.134	.053	.139	2.510	.012	

Thus, the hypothesis that Awareness, Association, Loyalty and Perceived Service Quality has a significant impact on Attitude was partially supported.

Testing the Effect of Customer Brand Equity Dimensions on Subjective Norms

Table 9 shows the correlation matrix between independent variables Awareness, Association, Loyalty, Perceived Service Quality and Subjective Norms. There is a significant positive correlation between Awareness, Association, Loyalty, Perceived Service Quality and Subjective Norms, as corresponding P-values are less than 0.05 and r>0. It was observed that the values of Pearson's correlation for the research variables; Awareness, Association, Loyalty, Perceived Service Quality and Subjective Norms, are 0.451**, 0.281**, 0.435** and 0.311** respectively.

Table 9: Correlation Matrix between Customer Brand Equity Dimensions and Subjective Norms

			1	2	3	4	5
1.	Awareness	Pearson Correlation	1				
		Sig. (2-tailed)					
		N	421				
2.	Association	Pearson Correlation	.256**	1			
		Sig. (2-tailed)	.000				
		N	421	421			
3.	Loyalty	Pearson Correlation	.425**	.220**	1		
		Sig. (2-tailed)	.000	.000			
		N	421	421	421		
4.	Perceived Service Quality	Pearson Correlation	.574**	.304**	.421**	1	
		Sig. (2-tailed)	.000	.000	.000		
		N	421	421	421	421	
5.	Subjective Norms	Pearson Correlation	.451**	.281**	.435**	.311**	1
		Sig. (2-tailed)	.000	.001	.001	.000	
		N	421	421	421	421	421

Table 10 shows the multiple regression analysis of the influence of Awareness, Association, Loyalty and Perceived Service Quality on Subjective Norms. it was found that P-values of the variables; Awareness, Association and Loyalty are 0.000 0.001and 0.000, implying a positive significant impact of Awareness, Association and Loyalty on Subjective Norms(β = 0.309, 0.178 and 0.306). however, there is an insignificant effect of Perceived Service Quality on Subjective Norms as the P-value is more than 0.05 and the coefficient is -0.034. Also, the R square is 0.296 which means that the model explains 29.6% of the variation in Attitude.

Table 10: Regression Model of Brand Equity Dimensions on Subjective Norms

Research Variables	Unstandardized Coefficients		Standardized Coefficients			R-Square
	B	Std. Error	Beta	t	Sig.	
(Constant)	.717	.250		2.868	.004	
Awareness	.309	.052	.311	5.972	.000	
Association	.178	.052	.148	3.402	.001	.296
Loyalty	.306	.051	.284	6.040	.000	
Perceived Service Quality	-.034	.057	-.031	-.599	.549	

Thus, the hypothesis that Awareness, Association, Loyalty and Perceived Service Quality has a significant impact on Subjective Norms was partially supported.

Applying the SEM for the Research Model

Table 10shows the SEM of the influence of Awareness, Association, Loyalty and Perceived Service Quality on Customer Intention. It could be observed that there is a significant influence of Awareness and Association on the Perceived Behavior Control with Estimates of 0.552 and 0.355respectively, as well as P-values of 0.023, and 0.000 respectively, while there is an insignificant impact of Loyalty and Perceived Service Quality on Perceived Behavior Control with Estimates of -0.045, and -0.090 as well as p-value of 0.676, and 0.670 respectively. Also, the R square is 0.944 which means that Awareness and Association explains 94.4% of the variation in **Perceived Behavior Control.**

Likewise, there is a significant positive impact of Association, Awareness and Perceived Service Quality on Attitude with Estimates of 0.285, 1.469 and 0.774 as well as p-value of 0.002, 0.000 and 0.000, while, there is an

insignificant effect of Loyalty on Attitude with Estimate of 0.043 as well as p-value of 0.000. Also, the R square is 0.628 which means that Association, Awareness and Perceived Service Quality explains 62.8% of the variation in **Attitude.**

Likewise, there is a significant positive impact of Association, Awareness, Loyalty and Perceived Service Quality on Subjective Norms with Estimates of 2.084, 0.351, 0.358 and 1.577 as well as p-value of 0.000, 0.003, 0.009 and 0.0000. Also, the R square is 0.210 which means that Brand Equity explains 21% of the variation in **Subjective Norms.**

Table 10: SEM for Research Model

				Estimate	P	R-Square
Perceived Control	**Behavior**	<---	**Awareness**	.552	.023	.944
Perceived Control	**Behavior**	<---	**Association**	.355	***	
Perceived Control	**Behavior**	<---	**Loyalty**	-.045	.676	
Perceived Control	**Behavior**	<---	**Perceived Service Quality**	-.090	.670	
Attitude		<---	**Association**	.285	.002	.628
Attitude		<---	**Awareness**	1.469	***	
Attitude		<---	**Loyalty**	.043	.691	
Attitude		<---	**Perceived Service Quality**	.774	***	
Subjective Norms		<---	**Awareness**	2.084	***	.210
Subjective Norms		<---	**Association**	.351	.003	
Subjective Norms		<---	**Loyalty**	.358	.009	
Subjective Norms		<---	**Perceived Service Quality**	1.577	***	

The model fit indices; CMIN/df = 4.330, GFI = 0.874, CFI = 0.865, and RMSEA = 0.089 are all within their acceptable levels.
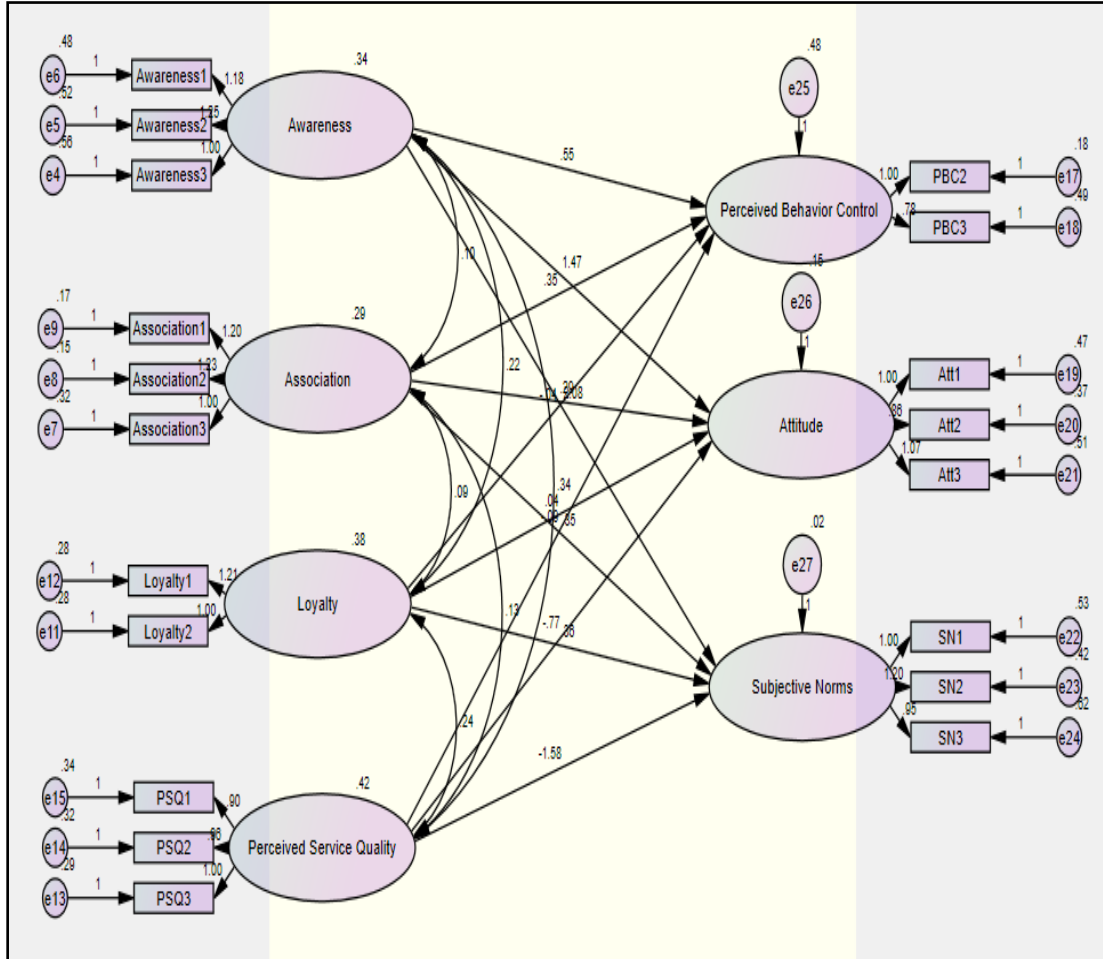
Figure 1: SEM Model

5 Conclusion and Recommendations

The above results illustrate the role of Brand Equity to cope with customers planned behavior in the Egyptian banking sector of e-services. This means that brand equity is an important issue for customers to achieve their planned behavior in favor of a certain bank. It could be observed that customers do not have the required level of planned behavior to use the e-banking services,

which implies the application of brand equity through mainly having good awareness and association regarding the banks and how they might serve their customers. This will lead to customers being willing to use their e-banks services specially in that global world nowadays.

The following recommendations are suggested for future research. The same study could be conducted for each banking sector separately to be able to determine factors affecting customers planned behavior in each sector. A comparative analysis could be conducted between private and public Egyptian banks to be able to compare between different sectors equity. In addition, a study could be conducted to evaluate the role of brand equity in different sectors other than the banking sector.

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Appendix: Research Questionnaire

Statements	Scale				
	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	1	**2**	**3**	**4**	**5**
Brand Awareness (Jalilvand et al., 2014) (Rios and Riquelme, 2008)					
I have heard of E- Banking Services.					
Some characteristics about E-Banking Services come quickly to my mind.					
I can recognize E- Banking Services among other competing online businesses					
Brand Association (Rios and Riquelme, 2008) (Pinar et al., 2012)					
I prefer E- Banking Services because price deals are frequently offered.					
It feels safe to conduct transactions in E- Banking Services.					
E- Banking Services is known for providing the best quality service					
Brand loyalty (Jalilvand et al., 2014; Pinar et al., 2012; Rios and Riquelme, 2008)					
I would like to refer to E- Banking Services again in the future.					
I intend to recommend E- Banking Services to my family and friends.					
E- Banking Services is my first choice.					
Brand Perceived Service Quality (Jalilvand et al., 2014;Pinar et al., 2012)					
There is a high level of cleanliness at E- Banking Services.					
There is a high quality of financial E- Banking Services.					
E- Banking Services is one of the preferred transactions I want to					

refer.					
Attitude (Alhassan et al., 2018; Jalilvand et al., 2014)					
In my opinion, E- Banking Services is a good activity.					
I think that E- Banking Services at home is interesting task.					
If everything goes as I think, I will plan to refer to E- Banking Services in the future.					
Perceived Behavior control (Jalilvand et al., 2014)					
How much control do you have over referring E- Banking Services again?					
If I chose to, I would be able to refer to E- Banking Services again.					
I will repeat E- Banking Services again.					
Subjective Norms(Jalilvand et al., 2014)					
Important people in my life say I ought to refer to E- Banking Services again.					
My Family think I should refer to E- Banking Services again.					
People around pressure me to refer to E-Banking Services.					