The Casual Chain of Relationship Among the Antecedents of Brand Equity in Pakistan's Higher Education Sector

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Abstract

The study aims at investigating brand equity along with its relevant determinants specifically the students’ preferences as proposed in earlier literature then institutes of higher studies will be not only attract a mass number of students' but be able to serve the society in a far better manner. In addition, the objective of this study is also to examine the causal chain of a relationship among the antecedents of brand equity like students preferences, brand meaning, students' satisfaction, trust, and commitment with the mediating role of attachment strength in the higher education sector of Pakistan. A survey questionnaire was used for the collection of data from graduate level students of Pakistani Universities from Khyber Pakhtunkhwa (KPK), Azad Jammu & Kashmir (AJK) and Gilgit-Baltistan. A sample of 255 students was analyzed using SmartPLS3.2.7. The findings of the study revealed that there exists a causal chain of a relationship among the constructs of the conceptual model. Furthermore, attachment strength fully mediates between brand meaning and the relationship factors like Students' satisfaction, and trust while partially mediates amid brand image on student commitment. This paper is an effort to provide ample guidelines to the policymakers in the higher education sector.

Keywords: Brand Meaning, Relationship Factors, Attachment Strength, Higher Education

According to American Marketing Association (AMA) brand is a name, term, symbol, design, or a combination of them to identify the goods and services of a company or to differentiate them from competitors. In this perspective Selame and Selame (1988) emphasizes the fact that in the modern era people's likes and dislikes is determined by branding. In the context of higher education, Valtere (2012) argued that for successful operations branding is equally important in higher education as in other forms of business. In addition branding aids in locating a higher education institution (HEI) in a social world. The trade mark attached to an HEI helps the community members to recognize an institute also excellent trade mark with rich historical background remained a place of prestige, honor and association for students (Rothblatt, 2008). In the recent literature Lim, Jee & De Run (2018) used higher education marketing mix to strategically brand an educational institute.

Earlier literature was mostly focused on the strength that generated from successful branding (Watkins & Gonzenbach, 2013; Dholakia & Acciardo, 2014) while this study is a step towards further understanding the under developing area of brand related segments like students' preferences (Hussain & Syed, 2016; Sharon, Darragh, & John 2018), the brand attachment strength (Zhang, Qiwei, Chang, & Chi-Pang, 2018) of the students with the HEI, and their significance in higher education (Chapleo, 2010). The study is a response to the gaps identified by Dennis et al. (2016) regarding a definite mechanism of the brand characteristics and Melewar and Nguyen (2014) who emphasized on the study of a series of branding topics in higher education. The primary objective of the study was to examine a causal chain of a relationship between the students' preferences & brand meaning and their impact on brand equity through strong brand attachment, students’ trust, commitment, and satisfaction. This causal chain is described by various scholars like Sanchez (2012) in her study stress the importance of the understanding of students preferences and its impact on brand meaning and considered this correlation vital for higher education institutions (HEIs). Moreover, review of earlier literature revealed the fact that brand meaning positively influences satisfaction, commitment, attachment (Dennis, Papagiannidis, Alamanos, & Bourlakis, 2016), and trust (Ghosh, Whipple & Bryan, 2001). Furthermore, brand attachment affirmatively affects
satisfaction (Chinomona, 2013), commitment (So, Parsons, & Yap, 2013), and trust (Ridha, 2017; Tsiotou &Rodoul, 2010). In addition, satisfaction, trust, and commitment are considered as strong antecedents in the formation of brand equity (Jillapalli & Jillapalli, 2014: Dennis et al., 2016; Keller, 2001). Secondly, this study also inspects the mediating character of attachment strength between the brand meaning and relationship factors like students' satisfaction, trust, and commitment.

It is becoming a challenge for universities around the world in attracting, recruiting and maintaining students due to stiff competition in the field of higher education (Bock, Poole, & Joseph, 2014). A large number of Pakistani students are availing the opportunity to study abroad. That is why Pakistan is considered the fourth largest in the world in outbound higher studies and the number raised to alarming 30,000 students per year in various disciplines (DAWN, 2019). This scenario could be the result of weak attachment of students with the Higher Education Institutions, the lack of confidence in the current education system or may the low ranking of Pakistani universities on the international ranking index. The higher education commission is in progress to curtail the underlying problem and is taking enormous steps to improve students' preferences by offering inland indigenous scholarships each year for higher studies, guidelines to universities for offering programs in unexplored areas, and strengthening the quality assurance in higher education (HEC, 2019).

The current research is valuable for the higher education sector in Pakistan. Universities and degree awarding institutions are struggling to offer extensive services for the attraction of new enrollments and retention of currently enrolled students. This study will help the HEIs management and policymakers to set a new direction in focusing on students preferences and attachment strength for strengthening the brand equity of their institutions. Secondly, this study will be a milestone in sparking the image of Pakistani higher education institutions to regain its place in the globe while strengthening their own brand equity first at national level and then internationally. Third, this study will be helpful for Students and parents as they may need to know the critical factors before enrollment. Fourth, teachers, will come to know the factors which will be helpful in elevating the students' preferences has a positive impact on brand meaning.

Literature Review

The conceptual framework of the study is based on Keller's (1993, 2001) customer-based brand equity (CBBE) model. The customer-based brand equity (CBBE) is the consumer knowledge and experience of the brand its image, integrity, and share of the market. Moreover, this study is the extension of the earlier work by Jillapalli & Jillapalli (2014) and Dennis et al. (2016) on brand equity.

The influence of students' preferences on the brand meaning

According to Economic Times (2018), report preference is the degree of likeness or interest a consumer has in a product or service. A consumer always wants certain attributes which a product/service must have to be preferred. Moreover, in higher education the students' preferences is a list of attributes on the basis of which they favor an institution like suitable courses, academic excellence, reputation, placement opportunities, quality teaching, quality of education, and university ranking (Briggs & Wilson, 2007; Drydakis, 2016; Ordin & Rose, 2015; Broecke, 2012). The significance of the word "meaning" in the branding context is underlined when we imagine how the character of a brand has developed from the recognition of a product's producer to the actual use or consumption of the product (Karamaki, Lahtinen & Tuominen, 2018). Moreover, in higher education perspective Alwi and Kitchen (2014) conclude that the creation of an affirmative brand meaning leads to the unique positioning of the HEI in relation to rivals. Furthermore, students preferences have a considerable impact on brand meaning in higher education (Dennis et al., 2016; Sanchez, 2012). This information leads us to the formation of the following hypothesis.

\( H_1: \) Students' preferences has a positive impact on brand meaning

The impact of brand meaning on the attachment strength

Brand meaning is an emerging concept in branding literature and due to this fact Davis (2007) and Oakenfull, Blair, Gelb & Dacin (2000) have linked it to brand attributes, Henderson, Cote, Leong and Schmitt (2003) relate it to brand association, Escalas and Bettman (2005) connect it to brand personality, Batey (2008) liked it to the brand's tangible and intangible properties, First (2009) described it from the product positioning point of view, Chard (2013) explicate it from the perspective of primary and implicit brand meaning, while Karamaki et al., (2018) through a conceptual model explained it in the light of three environments, social, individual and the marketing. Brand meaning is an area which is aligned with the mission of a higher education institution, the concept of brand meaning is developed from the understanding of brand knowledge (Elizabeth and Esi, 2016). The establishment of distinct brand positioning of higher education.
institution as compared to competitors is based on the development of a positive meaning of brand in the mind of students (Alwi and Kitchen, 2014).

Attachment strength is largely based on the theory of attachment proposed by Bowlby (1969). Hwang, Baloglu & Tanford (2019) relate attachment strength to the perceived fairness of product or service provider. Brand attachment is the effective relationship between the brands and the consumers and is one of a significant sign for forecasting buying activities (Park, Maclnnis, Priester, Eisengerich & Iacobucci, 2010). Malär, Krohmer & Hoyer (2011) in their study stated that brand attachment can be said to be “connecting consumers to particulars and enabling them accessible to brands”. In marketing and psychology, the issue of brand attachment became a debatable topic of mutual concern due to stiff competition (Wen, Sha, & long, 2011). Kang, Manthiou, Sumarjan & Tang (2017) argued that consumers be likely to take a meticulous brand into attention, also consumers will be apt to bring a peculiar brand into a person’s personality qualities, and the link between themselves and the brand strongly related. Dennis et al. (2016) in his study on higher education revealed that brand meaning has a significant influence on attachment strength. This literature leads us to the formation of the following hypothesis.

\[ H_2: \text{Brand meaning has an affirmative impact on attachment strength} \]

The influence of Brand meaning and attachment strength on relationship factors

The second part of the model evaluates the impact of brand meaning and attachment strength on the relationship factors namely satisfaction, trust, and commitment which resultantly affect the brand equity. Rowley (2003) argued that “in higher education students feel satisfaction when their feedback is taken regularly by the university”. Student support services, institute environment, and the effectiveness of teaching methodology have a long-lasting influence on the overall satisfaction of students (Elliot & Healy, 2001). The higher education commission and the government of Pakistan are taking considerable steps in higher education for the satisfaction of students (Butt & Rehman, 2010). Trust emerges from the affirmative messages spread by the university regarding students facilitation and future opportunities, students are encouraged by the positive attitude of the service providing institutions (Gibbs & Dean, 2015). When university students are sure that the university will provide them with an opportunity of growth and learning then consequentially their level of commitment rises. Moreover, Students’ degree of commitment in the direction of the school is connected to their mindset about the school (Trivellas & Santouridis, 2016).

Chinomona, (2013) in his study found a strong correlation between brand attachment and satisfaction. In addition, stronger the attachment of the consumer with the brand, stronger will be the commitment which ultimately enhances the loyalty of the consumer with the firm (So et al., 2013). Dennis et al (2016) in his study argued that “in the higher education framework brand commitment is influenced by brand attachment”. Moreover, in order to retain students, institutions do more to develop trust among them (O’Brian and Renner, 2002). Furthermore, Dennis et al (2016) argued that “the brand meaning as an antecedent of brand attachment positively affect trust, commitment, and satisfaction of the students”. Ridha (2017) and Tsiotsou (2010) in their studies confirmed that “brand attachment and trust are positively related to each other”. Additionally, both brand meaning and attachment positively affect trust (Ghosh et al., 2001). In light of the given literature, the following hypotheses are generated.

\[ H_2: \text{Brand meaning significantly affect a) satisfaction, b) trust, and c) commitment} \]

\[ H_3: \text{Attachment strength positively influences a) satisfaction, b) trust, and c) commitment} \]

Students’ trust, commitment, and satisfaction role in the evolution of brand equity

Ferrinadewi (2008) in his study argued that if a product has the capacity of marketability then the consumer will trust it and this creates an attachment between a consumer and the product. Moreover, the customer normally purchase benefits for the purpose of satisfaction so when he or she realizes the advantages and benefits of a product or service a sense of attachment develops between the customer and the product and the loyalty continue till the product deliver the needed expectations of the buyers (Keller, 2013). Furthermore, when the company meets or exceed customer expectations over the lifetime of a product or service and its attributes fulfill the needs and wants of a buyer then it is known as the state of satisfaction (Jurana, 1988).

According to the available literature, in the period from 2007 to 2010, a brand commitment reflected to be more connected with customer personality, self-identification with the brand and shared values (Raju, Unnava & Montgomery, 2009; Srivastava & Owens, 2010; Walsh, Winterich & Mittal, 2010). In the recent past, in the period between 2011 to 2015, scholars acknowledged the emotional investment aspect of the brand commitment, they further argued that branded products become the part of their live due to the trust factor and the buyer suppose to get emotional and functional values from it (Albert & Merunka, 2013; Danes, Hess, Story & Vorst, 2012;
Hur, Ahn & Kim, 2011; Magnoni & Roux, 2012; Tuškej, Golob, Podnar, 2013; Zhang & Bloemer, 2011). Recently, Osuna Ramírez, Veloutsou, Morgan-Thomas (2017) in their study point towards the importance of the three facts of brand commitment as "effective, calculative and normative. Brand equity is the value added in a product due to the marketing efforts and investments in a brand the company put in the past. Brand equity compares the performance of the brand from the past to the present and predicts the future value of the brand (Keller, 2013). The relationship factors like students’ satisfaction, trust and commitment have a deep and enduring impact on the brand equity of higher education institutions and its’ major stakeholders (Jillapalli & Jillapalli, 2014; Dennis et al., 2016). Keller (2001) in his study argued that "if the students feel satisfaction, trust the university and remain committed will ultimately boost the university brand equity". This research further extends the studies already conducted to strengthen the arguments in the context of HEI’s operating in Pakistan to explore the students' satisfaction level, trust on the institute and their commitment with the university which consequently can affect the brand equity of the institute. The available literature leads us towards the formation of the following hypotheses.

H5: Relationship factors have a positive impact on the formation of brand equity

The mediating role of attachment strength between the brand meaning and relationship factors

In earlier literature brand attachment is used as a mediator in hospitality search between brand experience and brand trust for lodging services in the study conducted by Kang et al. (2017). Moreover, Zhou (2012) study of brand communities anticipated that in the linkage between brand community commitment and brand commitment brand attachment plays a mediating role. In order to further strengthen the literature regarding the mediating role of brand attachment, the current study is looking into the matter of whether brand attachment strength mediates between brand meaning and relationship factors. The following hypothesis will test the mediation.

H6: Brand attachment mediates the relationship between brand meaning and the relationship factors

Figure 1. Conceptual Framework

Research Methodology

Data collection, and sampling

The data was collected through a self-administered questionnaire from the respondents using convenience and stratified random sampling methods from private and public sector universities of Pakistan. The population of the study were MS, M. Phil, and Ph.D. level students of Khyber Pakhtunkhwa (KPK), Gilgit Baltistan, and Azad Jammu and Kashmir (AJK) regions. The data was collected between April-July 2018, a total of 400 questionnaires were circulated among the respondents of the target population and 255 valid responses were received back (63.75%). The research analysis was performed on valid responses. The study questionnaire was based on a five-point Liker Scale. Measurement items of the study constructs were adapted from earlier literature of various scholars like students preference with seven-items from Pace and Kuh (1998), brand meaning with four-items from Alwi and Da Silva (2007), students' satisfaction with seven-items from Jillapalli and Jillapalli (2014), students’ commitment and trust with seven-items each from Jose’ et al (2009) and Jillapalli and Jillapalli (2014), attachment strength with six-items from Park et al. (2010) and Yoo, Donthu & Lee (2000), and the brand equity with six-items from Netemeyer et al. (2004).

Data analysis technique

The analysis is based on a causal chain of a relationship among the students' preferences, brand meaning, relationship factors, attachment strength and brand equity, the model paths is overtly visualized in the hypothesis. The evaluation of the path among the latent variables is performed using PLS-SEM. The conceptual model of the study is entirely based on earlier literature about branding related topics in higher education. The instrument used for data collection was surveyed questionnaire.
Data Analysis and Results

This section of the study includes a manifold statistical analysis of the data collected via a survey questionnaire. These assessments were carried out to support the research model, objective, hypothesis, and to describe a sophisticated result. First, the demographic and socioeconomic profiles of the respondents were briefly discussed. Secondly, the PLS-SEM model was used to obtain constructs reliability and validity using measurement and structural models. Third, the hypothesis was assessed using the path co-efficient lastly the mediation is evaluated by indirect effects.

Respondents’ demographic profile

The results show that young respondents specifically in the age group of up to 29 years (52%) were more active as compared to other age groups. Moreover, male respondents (67%) as compared to female were more enthusiastic in the survey. Furthermore, the results revealed that as compared to M. Phil and Ph.D. programs students enrolled in the MS program found more vigorous (47%) and the majority of the respondents belonged to the province of Khyber Pakhtunkhwa (54%). In addition, most of the respondents were from public sector universities (56%), also the majority of them were unemployed (59%), and a good number of them were from the urban area (56%) as compared to suburban and rural. Table 1 demonstrates the demographic profiling of the respondents in detail.

Table 1. Frequencies of the demographic profiles

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>%</th>
<th>Characteristics</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>171</td>
<td>67</td>
<td>Up to 50,000</td>
<td>138</td>
<td>54</td>
</tr>
<tr>
<td>Female</td>
<td>84</td>
<td>33</td>
<td>50,000-100,000</td>
<td>59</td>
<td>23</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td>100,000-150,000</td>
<td>33</td>
<td>13</td>
</tr>
<tr>
<td>Up to 29</td>
<td>133</td>
<td>52</td>
<td>150,000-200,000</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>30-39</td>
<td>84</td>
<td>33</td>
<td>200,000 plus</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>40 and above</td>
<td>38</td>
<td>15</td>
<td>Type of University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td></td>
<td></td>
<td>Public</td>
<td>143</td>
<td>56</td>
</tr>
<tr>
<td>Urban</td>
<td>143</td>
<td>56</td>
<td>Private</td>
<td>112</td>
<td>44</td>
</tr>
<tr>
<td>Sub-Urban</td>
<td>38</td>
<td>15</td>
<td>University Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>74</td>
<td>29</td>
<td>KPK</td>
<td>138</td>
<td>54</td>
</tr>
<tr>
<td>Enrollment</td>
<td></td>
<td></td>
<td>Gilgit Baltistan</td>
<td>54</td>
<td>21</td>
</tr>
<tr>
<td>MS</td>
<td>120</td>
<td>47</td>
<td>AJK</td>
<td>63</td>
<td>25</td>
</tr>
<tr>
<td>M. Phil</td>
<td>97</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>38</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>105</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Un-Employed</td>
<td>150</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reliability and validity

Latent variables having comparatively greater Cronbach’s alpha values normally 0.70 or greater than that signify that the items within the latent variable have the same array and sense (Cronbach, 1971). In Partial Least Square (PLS), inner consistency is calculated with composite reliability (CR) (Chin, 1998). The composite reliability value of at least 0.7 for a latent variable is considered satisfactory (Nunnally & Bernstein, 1994). It is clearly depicted in Table 2 that all loaded latent variables have CA range amid .851 to 0.936 so as CR range amid 0.851 to 0.963 and AVE for each is higher than 0.50. The stated arguments provided a solid base for the reliability and validity of the data.

Table 2. Constructs internal consistency reliability and convergent validity

<table>
<thead>
<tr>
<th></th>
<th>CA</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment Strength</td>
<td>0.851</td>
<td>0.851</td>
<td>0.564</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>0.872</td>
<td>0.932</td>
<td>0.644</td>
</tr>
<tr>
<td>Brand meaning</td>
<td>0.765</td>
<td>0.840</td>
<td>0.622</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.936</td>
<td>0.943</td>
<td>0.668</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.843</td>
<td>0.936</td>
<td>0.575</td>
</tr>
</tbody>
</table>
**Student Preferences**

<table>
<thead>
<tr>
<th></th>
<th>0.870</th>
<th>0.890</th>
<th>0.588</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>0.882</td>
<td>0.963</td>
<td>0.589</td>
</tr>
</tbody>
</table>

**Discriminant Validity**

Urbach and Ahlemann, (2010) state that discriminant validity examine whether the items do not accidentally evaluate extraordinarily. In order to measure the discriminant validity of the data, we used Fornell-Larcker’s criterion (Fornell & Larcker, 1981). Fornell and Larcker’s criterion of the present effects illustrates that every square root of AVE exceeds the off-diagonal elements in their corresponding row and column. Table 3 illustrates that all off-diagonal elements are smaller than the square roots of AVE. Therefore, the consequence proves that Fornell and Larker’s criterion is satisfied.

**Table 3. Discriminant Validity**

<table>
<thead>
<tr>
<th></th>
<th>AS</th>
<th>BE</th>
<th>BM</th>
<th>CT</th>
<th>SA</th>
<th>SP</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment Strength</td>
<td>0.768</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Equity (BE)</td>
<td>0.632</td>
<td>0.793</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand Meaning (BM)</td>
<td>0.731</td>
<td>0.462</td>
<td>0.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment (CT)</td>
<td>0.734</td>
<td>0.685</td>
<td>0.655</td>
<td>0.845</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction (SA)</td>
<td>0.610</td>
<td>0.756</td>
<td>0.611</td>
<td>0.691</td>
<td>0.764</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students’ Preferences</td>
<td>0.571</td>
<td>0.447</td>
<td>0.617</td>
<td>0.544</td>
<td>0.465</td>
<td>0.735</td>
<td></td>
</tr>
<tr>
<td>Trust (TR)</td>
<td>0.641</td>
<td>0.674</td>
<td>0.587</td>
<td>0.742</td>
<td>0.762</td>
<td>0.537</td>
<td>0.791</td>
</tr>
</tbody>
</table>

**Hypotheses Testing**

Each path of the SEM model makes a hypothesis. It allows the scholar to justify or deny each hypothesis with consideration of the effectiveness of the relationship amid dependent and independent variables. In this study, every hypothesis is assessed with the values of significance level (P < 0.05), observed t-statistics (t > 1.96), and the path coefficient (β > 0.10).

The results demonstrated in Table 4 shows that path from students preferences (SP) to brand meaning (BM) is significant and positive (H1), similarly is factual for the path from brand meaning to attachment strength (AS) (H2). Paths from brand meaning to satisfaction (SA) is positive and significant (H3a), but for trust (TR) (H3b), and commitment (CT) (H3c) are negative and insignificant. Paths from brand attachment to satisfaction (H4a), trust (H4b), and commitment (H4c) are also positive and momentous. Finally, paths from satisfaction (H5a), trust (H5b), and commitment (H5c) to brand equity (BE) are also significant and affirmative.

**Table 4. Testing of Hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>(β)</th>
<th>T-Statistics</th>
<th>Significance Level (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>SP -&gt; BM</td>
<td>0.594</td>
<td>17.864</td>
<td>0.000</td>
</tr>
<tr>
<td>H2</td>
<td>BM -&gt; AS</td>
<td>0.476</td>
<td>11.100</td>
<td>0.000</td>
</tr>
<tr>
<td>H3a</td>
<td>BM -&gt; SA</td>
<td>0.055</td>
<td>0.841</td>
<td>0.401</td>
</tr>
<tr>
<td>H3b</td>
<td>BM -&gt; TR</td>
<td>0.052</td>
<td>0.936</td>
<td>0.349</td>
</tr>
<tr>
<td>H3c</td>
<td>BM -&gt; CT</td>
<td>0.123</td>
<td>2.295</td>
<td>0.022</td>
</tr>
<tr>
<td>H4a</td>
<td>AS -&gt; SA</td>
<td>0.288</td>
<td>4.891</td>
<td>0.000</td>
</tr>
<tr>
<td>H4b</td>
<td>AS -&gt; TR</td>
<td>0.324</td>
<td>5.647</td>
<td>0.000</td>
</tr>
<tr>
<td>H4c</td>
<td>AS -&gt; CT</td>
<td>0.451</td>
<td>7.674</td>
<td>0.000</td>
</tr>
<tr>
<td>H5a</td>
<td>SA -&gt; BE</td>
<td>0.541</td>
<td>9.187</td>
<td>0.000</td>
</tr>
<tr>
<td>H5b</td>
<td>TR -&gt; BE</td>
<td>0.101</td>
<td>1.873</td>
<td>0.050</td>
</tr>
<tr>
<td>H5c</td>
<td>CT -&gt; BE</td>
<td>0.261</td>
<td>4.187</td>
<td>0.000</td>
</tr>
</tbody>
</table>

significant at: β > 0.10, t > 1.96, P < 0.05

**Mediation assessment**

The analytical approach explained by Preacher and Hayes (2008) is applied to the study for testing the mediation hypotheses through indirect effects (Williams & MacKinnon 2008) The total effect of Brand Meaning (BM) on Satisfaction (SA) was found significant (β = .194, t = 3.051, p < .05). When the mediator Attachment Strength (AS) is introduced brand meaning shows an insignificant direct effect on satisfaction, albeit reduced (β = .061, t = .877, p > .05). As Table 5 shows, the indirect effects of brand meaning on satisfaction through attachment strength found significant (β = .143, t = 4.381, p < .05). This means that attachment strength fully mediates the influence of brand meaning on students’ satisfaction.
The total effect of brand meaning on Trust (TR) was found significant ($\beta = .214, t = 3.962, p< .05$). When the mediator brand attachment is introduced brand meaning shows an insignificant direct effect on trust, albeit reduced ($\beta = .058, t = .963, p>.05$). As Table 5 shows, the indirect effects of brand image on trust through attachment strength found significant ($\beta = .161, t = 5.066, p<.05$). This means that attachment strength fully mediates the influence of brand image on students’ trust.

The total effect of brand meaning on Commitment (CT) was found significant ($\beta = .324, t = 6.877, p< .05$). When the mediator brand attachment is introduced brand meaning shows a significant direct effect on commitment, albeit reduced ($\beta = .131, t = 3.346, p< .05$). As Table 5 shows, the indirect effects of brand image on commitment through attachment strength found significant ($\beta = .232, t = 6.102, p< .05$). This means that attachment strength partially mediates the influence of brand image on students’ commitment. Results are summarized in Table 5.

### Table 5. Mediation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Total Effect</th>
<th>Direct Effects</th>
<th>Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>T</td>
<td>P</td>
</tr>
<tr>
<td>BM- &gt; SA</td>
<td>0.194</td>
<td>3.051</td>
<td>.002</td>
</tr>
<tr>
<td>BM- &gt; TR</td>
<td>0.214</td>
<td>3.962</td>
<td>.000</td>
</tr>
<tr>
<td>BM- &gt; CT</td>
<td>0.324</td>
<td>6.877</td>
<td>.000</td>
</tr>
</tbody>
</table>

### Discussion

The present study measure the impact of students’ preferences, brand meaning and relationship factors on the formation of brand equity in Pakistan higher education sector. The analysis of the hypothesis revealed the following results:

It is evident from the results that students’ preferences positively affect the brand meaning this finding is consistent with earlier studies of Karamaki (2018); Dennis et al. (2016), and Sanchez (2012) that it is becoming crucial for higher education institutions to undertake students preferences as they are the major stakeholders. Moreover, students’ preferences is a strong antecedent of the brand meaning.

Secondly, the study revealed that brand meaning has a significantly affirmative effects on attachment strength which is in line with the results obtained by Elizabeth & Esi (2016); Alwi & Kitchen (2014), and Dennis et al. (2016) that brand meaning is not only align with the mission of the institute but it also creates a positive of the entity in the mind of the student which ultimately generate a strong bond between brand meaning and the attachment strength.

Third, The study findings also confirmed that brand meaning positively affect students’ commitment with the institute this evolution is also consistent with the studies conducted by the earlier scholars (Manyiva, Priporas & Wang, 2018; Dennis et al., 2016; Ridha, 2017; Chinomona, 2013; Jillapalli and Wilcox, 2010). A considerable number of universities that invest in brand management are increasing with the passage of time (Melewar & Akel, 2005). Beside the presence of a causal chain of relationship among certain constructs in the conceptual model this study contradicts with the studies carried out by Dennis et al. (2016), Jillapalli and Jillapalli (2014) and Ghosh et al. (2001) in addressing an insignificant relationship between the brand meaning and relationship factors like students’ satisfaction and trust. This means that brand meaning in Pakistan’s higher education sector does not aid in either satisfaction or trust of the students. It may due to the fact that this facet may not be clearly portrayed or the people associated with the higher education sector in Pakistan may not be having a clear understanding of the philosophy behind this feature like institute’s unique characteristics, reputation, and precise associations.

Fifth, it was also confirmed from the findings that students’ attachment strength with the institute positively influences the relationship factors which is in line with studies of Belaid and Temessek (2011); Power, Whelan, and Davies (2008); Jillapalli & Wilcox (2010); Thomson (2006); Jillapalli & Jillapalli (2014); Algesheimer, Dholakia, & Herrmann (2005) that attachment of the university is strongly correlated with students’ satisfaction they receive from the services provided.
by the university. This positive satisfaction leads towards the trust building between the student and the varsity and consequently made the student committed to his studies and the institute.

Sixth, The results of the study also revealed that relationship factors affirmatively affect the brand equity of the institute which is consistent with the studies conducted by Jillapalli & Jillapalli (2014); Dennis et al. (2016); and Keller (2013) that brand equity is the soul of marketing efforts put by the institute while the relationship factors like students’ satisfaction, trust and commitment are the antecedents which are responsible to create a differential effect on the ultimate stake holders like the students of the institute

Finally, the results of the mediation analysis indicate that attachment strength partially mediates between the brand meaning and students’ commitment but fully mediates amid brand meaning and relationship factors like students’ satisfaction and trust. This means that the direct path between the brand meaning and relationship factors that is the students’ satisfaction and trust is comparatively a weaker link as compared to the indirect path towards the formation of the brand equity of an HEI. In the light this discussion we can say that the relationship among brand meaning, students’ satisfaction and students’ trust can be explained in a better way with help of the mediation of attachment strength. It is further stated that students’ preferences play a vital role in the development of a causal chain of a relationship among the various constructs in the conceptual model and it highlighted itself as one of the antecedents in the formation of brand equity in the contemporary literature. In available literature although attachment strength is used as a mediator in certain fields (Hwang, Baloglu & Tanford, 2019; Kang et al., 2017; Zhou et al., 2012) but in the higher education sector it is taken as a mediator for the first time between the brand meaning and relationship factors and is an addition to the contemporary literature.

Conclusion

On the basis of the results of the study it is concluded that brand equity of a higher education institution is influenced by relationship factors, brand meaning and the students preferences. Brand equity expresses the brand value of a product or service, certain elements are responsible for the creation of brand equity. These days an HEI is mostly favored by students if it have a strong brand equity. Moreover, in this study the Keller’s (1993, 2001) Customer-Based Brand Equity (CBBE) model is further extended by incorporating the students’ preferences and using attachment strength as a mediator between brand meaning and relationship factors in the conceptual model. Furthermore, the outcome of the study confirmed that there exists a causal chain of a relationship among the constructs of the conceptual model responsible for the evolution of brand equity in an HEI.

The attachment strength of the student with the HEI was critically examined and tested as a mediator between brand meaning and relationship factors and interestingly it fully mediates some of the paths which are considered as a recent development in higher education literature and will further strengthen the existing body of knowledge in the said filed. Since the inception of marketing field it is repeatedly claimed by the earlier scholars that user or consumers decide the fate of a product or service. In the case of HEI’s student is the major stakeholder who decide to join and remain, on the basis of his consent and positive word of mouth, universities establishes its worth in the society. In this study students’ preferences is taken as the main antecedent of brand equity. The results show that through a circular chain students’ preferences significantly affect the brand equity of an HEI.

Pakistan is one of the populous country in South Asia and the majority of its population is composed of young people. On the global arena countries with higher education attainment are considered socially and economically stable. Pakistan since its independence is facing up and down in its major sector and education is one among them, the literacy rate in the country as compared to other counterparts in South Asia is low and very few of its higher education institutions are competing on the world universities rankings. This study is an effort to divert the attention of the policy makers in the higher education sector to develop such strategies to elevate the level of higher education institutions so that Pakistani universities may be considered a symbol of success.

Limitations and future directions

The current study remained limited to cross-sectional due to certain environmental and physical constraints it is suggested that future researchers may conduct a longitudinal study. In the study, the brand meaning does not affect students’ satisfaction and trust which need further investigation. This study was conducted in three regions of Pakistan future researcher can expand it to other major regions to inflate the scope of the study. In this study, only graduate-level students were encircled future researcher can include undergraduate students in their work.
References


O’Brien, B.S., Renner, A.L. (2002). Online Student Retention: Can It Be Done?


