

**Perceived Value as a Moderator in the Trust-Loyalty  
Relationship: Insights from Egyptian Higher Education  
Institutions**

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**Abstract.**

This research aims to investigate the perceived value effect as a moderator on the relationship between students' trust and loyalty in Higher Education Institutions in Egypt (HEIs). Smart-PLS 2.0 software was used to analyze 245 responses from a randomized sample of senior students and fresh graduates from multiple Egyptian private universities using the structural equation modeling. The outcomes of the research show that students' trust significantly and positively effects on students' loyalty and the student's perceived functional value effect on the relationship between students' trust and student loyalty as a moderator.

**Keywords.** Emotional attachment, Higher Education institutions, Perceived Quality, Student Trust, Student loyalty.

## المخلص:

يهدف هذا البحث إلى دراسة تأثير القيمة المُدرَكة، كمُؤثِّر، على العلاقة بين ثقة الطلاب وولائهم في مؤسسات التعليم العالي في مصر. استُخدِم برنامج Smart-PLS 2.0 لتحليل ٢٤٥ استجابة من عينة عشوائية من طلاب السنة النهائية والخريجين الجدد من عدة جامعات مصرية خاصة باستخدام نمذجة المعادلات الهيكلية. أظهرت نتائج البحث أن ثقة الطلاب تؤثر بشكل كبير وإيجابي على ولائهم، وأن تأثير القيمة المُدرَكة المرتبطة بالأداء الوظيفي للطلاب على العلاقة بين ثقة الطلاب وولائهم كعامل مؤثِّر.

**الكلمات المفتاحية:** التعلق العاطفي، مؤسسات التعليم العالي، الجودة المُدرَكة، ثقة الطلاب، ولاء الطلاب.

## 1. Introduction.

The position of trust and loyalty in shaping students' experiences and outcomes in higher education is well-established in literature, with trust being identified as a key driver of students' perceptions of their institution and loyalty being recognized as an important predictor of student retention and engagement. However, there remains a paucity of understanding about the factors that moderate trust and loyalty relationship in HEIs. Quantitative methodology is employed to examine the extent to which perceived value exerts an amplifying effect on the relationship between students' trust and their loyalty. Findings of this research have significant implications for higher education institutions, as they strive to foster optimal learning environments while enhancing student engagement and retention.

## **2. Literature Review.**

### **2.1 Students` Trust and Loyalty.**

Trust has been researched in many disciplinary fields; philosophy, psychology, management, and marketing (Wang & Emurian, 2005). There is a multifaceted construct that includes cognitive elements and an effective component, which is based on the consumer's knowledge of the organization, the organizations' capabilities and the emotional tie between them that strengthens over time (Dowell et al., 2015). Trust plays a vital role in student accomplishment, Students who have little trust in their teachers and institutions achieved low levels of learning (Romero, 2015).

For the past three decades, Scholars and policymakers have concentrated on increasing their student trust in the universities (Horvat et al., 2013; Romero, 2015). Ghosh et al. (2001) were one of the initiatives who argue that student trust is a long-term solution that Higher education institutions may implement in current competitive situation. They proposed a students' trust can affect all the following: enrollment, retention rates, quality perceptions, word of mouth, and alumni involvement across higher education institutions as well as reduce sensitivity to cost increases. In the context of HEIs, their study found that there are eight key multiple items that contribute to students' trust: Expertise which is perceived knowledge and technical skills in the field of education, perceived congeniality which is reflected

in its friendliness, respect, and goodwill towards students , cooperation which is demonstrated by its willingness to work with students, timeliness in terms of effectively attending to students' needs, perceived integrity, which is when it is not perceived as compromising its ethical standards to achieve its organizational goals, openness in interpreting and revealing procedures and policies; perceived authenticity in being honest and keeping its promises to students and finally tactfulness in handling delicate student issues.

However, student loyalty appears to be dependent on the student relationship with the institution that provides the educational service rather than the student's satisfaction which is considered as only one outcome of the relationship with the received educational service (Annamdevula, 2017; Mosahab et al., 2010; Ng, 2018; Pedro et al., 2018; Snijders et al., 2018; Tong et al., 2018). Additionally (Gallegos & Vásquez, 2019) highlight that student loyalty is not only dependent on satisfaction, but it is a complex interaction between trust and commitment, while satisfaction is initial foundation, trust and commitment is essential to achieve lasting loyalty.

Chandra et al. (2019) identified a significant and positive relationship between student satisfaction and service quality, and between student satisfaction and loyalty. Similarly, the mediation role of student satisfaction on the relationship between service quality and student loyalty was validated by Annamdevula &

Bellamkonda (2016). Moreover, Rani & Nugraha (2021) found that perceived quality regarding academic staff, curriculum, market readiness, and acquired skills significantly influences student loyalty. Additionally, Addai et al. (2023) established that trust positively affects students' commitment and loyalty, and that loyalty is positively impacted by commitment. Khan et al. (2023) highlighted the importance of quality to improve the following decision-making roles; satisfaction, trust and loyalty within online learning. The study introduced OLQUAL (online learning quality) model which encompasses five quality dimensions: system, administrative, transformative, social and educational. Snijders et al., (2019) had been analyzed a research which collected from almost 150 alumni from two applied sciences Dutch universities by using a structured equation model to measure the relationship between trust as a one dimension of relationship quality in commitment and student engagement, the findings investigate that these quality dimension positively affect the student engagement which subsequently enhance the alumni loyalty which investigate a non-monetary contributions.

As a result of the literature review on the two variables; students' trust & student loyalty, this study proposes that there is a significant relationship between these variables. This leads to the hypothesis one: *There is a significant and positive relationship between students' trust and students' loyalty.*

## ***2.2 Perceived Value.***

Kotler and Keller (2015) describe values as the encompassing of tangible and intangible benefits and costs perceived by customers whereas Customer value is indicative of the level of satisfaction delivered from the benefits received which include the quality of service, brand image, adequate prices, and promptness of delivery of products or services. The consumption values theory (TOCV) is the foundational conceptual model in the study of perceived value. TOCV based on three assumptions: first, is that consumer decision making is influenced by multiple consumption values; second, is that consumption values contribute differently to any given choice situation; and third, that values are independent by Yonggui et al., (2019). The theory elucidates the reasons behind the purchasing decision after evaluating multiple consumption values including enjoyment, quality, value-for-money and their trade-offs Newman et al., (2017). According to Yang et al., (2016). While the theory has primary focused on the value components that affect consumption choice decision only. It is important to recognize that the cognitive concept of perceived value also influences many other behavioral outcomes, like behavior usage intentions, customer satisfaction, and customer loyalty behavior

As a result, students who value the educational services and have interpersonal interactions provided by HEIs are most likely loyal and eager to finish their degree at that particular higher education institution, refer to others and more willing to return

for future studies Todea, et al., (2022). Based on the theoretical background of the relationship between students' trust, perceived value, and students' loyalty, there is no enough research on examining the moderating effect of the perceived value between the two variables. Therefore, the current research proposes that there are significant moderating effects of student perceived value on the trust-loyalty relationship in the higher education institutions. This leads to hypothesis two: *Students' perceived value has a significant moderating effect on the relationship between students' trust and students' loyalty.*

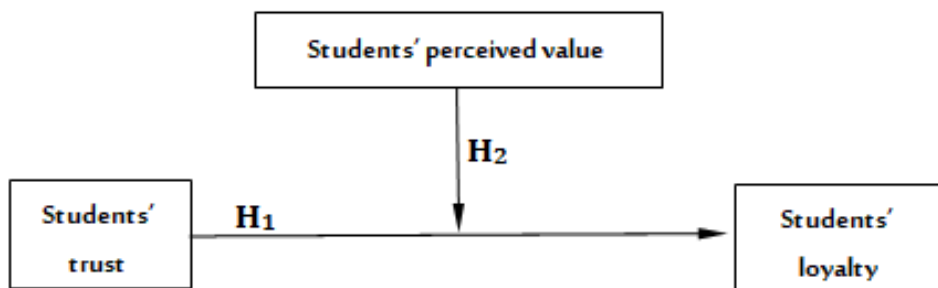
### **3. Research Gap and the Conceptual model.**

According to the above analytical and critical review on perceive trust, student loyalty and perceived value within the higher education context that there is a clear conceptual gap in understanding the interrelationships between the three contexts and their dynamic behavior and reciprocity of influence among them. This academic gap reflects not only one on theorization of this multidimensional marketing phenomenon but also lends significant policy implications to the managerial practice of those significant marketing ends and tools with special reference to Egyptian universities as a higher education market and industry of considerable magnitude and spell over effect regionally and globally.

The underlying rationale for proposing one more model for marketing the educational portfolio rendered by Egyptian

universities as far as this research is concerned lies in how to devise perceived trust to achieve higher levels of customer loyalty as moderated by perceived value of services which provided by such institutions. So, the main objective of the proposed framework would be to conceptualize the essence of the variables for universities as marketers in higher education and argue for precise relationships among the three of them.

Another important contribution sought by this proposed model would be to look at the values of perceived learning, employability and brand equity as perceived by the target customer basis/ market segments of universities. Consequently, the expected deliverables of empirically testing of this model arguments ought to be demonstrated in judging the effectiveness of building perceived trust for a specific customer loyalty agenda while considering how perceived value can boost the significant and positive impacts to new unprecedented levels. Figure.1 shows the research framework according to the research hypotheses.





### **Figure 1. Research conceptual Model**

**4. Research Hypotheses.** Therefore, this model can be substantiated empirically through testing the following hypotheses:

H1: - There is a significant & positive relationship between students' trust and students' loyalty.

H2: - Students' perceived value has a significant & positive moderating effect on the relationship between students' trust and students' loyalty.

**5. Research Methodology.** The methodology adopted for this research consists of the following components:

#### **5.1 Research design.**

this research relied on two main research designs in different stages ; An exploratory research design in the form of analytical and critical literature review on perceived trust, customer loyalty and perceived value globally and within the context of Egyptian universities to define the research problem and hypotheses and a conclusive descriptive design based on single cross sectional data collection design to examine and test the research hypothesis describing the relationship between the variables.

#### **5.2 Sampling design and plan.**

sampling unit comprising present university students enrolled in competitive world class programs in Egyptian universities with a

sampling guide of them as an indefinite population and an interval scaling of the three main model variables and nominal scaling for demographics of students through a survey based structured questionnaire distributed on a personal interview and digital means. A non-probability Quota sampling techniques has been used based on the significant demographics criteria of students.

### **5.3 Measurement, Scaling and data collection.**

The variables investigated by this research (i.e., students' trust, loyalty, and perceived value) have mainly relied on well-established 5-point interval scales that extracted from relevant literature and adapted to research context. Students' trust was assessed using Ghosh et al. (2001) six-item scale. Also, a six-item scale adapted from Hennig et al. (2001) was used to measure students' loyalty. Students' perceived value is a multifaceted idea made up of eight dimensions with a total of twenty-six items based on Ledden et al. (2007): epistemic value & social value dimensions are composed of four items for each. Functional value, emotional value, and conditional value dimensions are composed of three items for each. The image dimension includes five items, and finally, each of monetary and non-monetary sacrifice dimension is composed of two items. That is along with nominal scaling for relevant demographics of students as sampling units. Data was collected using a survey-based on structured questionnaire which distributed via either

personal interview or digital means. The analysis of data involved descriptive statistics, encompassing mean, standard deviation, and correlation coefficient for the sample data. Additionally, evaluating measurement models and testing the proposed hypotheses have been completed by using PLS-SEM.

## 6. Results.

245 senior and recently graduated students from Egyptian private universities that prioritized quality were chosen to take part in the study. The sample size was reduced to 226 observations after data cleaning of doubtful response patterns (Hair et al., 2017). Participants' demographic profile can be characterized as follows: There are slightly more female participants (56.2%). The vast majority of participants—88.5%—are seniors. The research sample represents all Egyptian private universities under consideration.

### *Assessment of measurement model*

Researchers rely on the PLS-SEM using SmartPLS, V3.2.9 in order to evaluate the validity and reliability of variables measurement as well as to evaluate the structural model (Ringle et al., 2015).

The PLS statistical results related to the variables' measurement model are displayed in Table 1. The research variables include trust “X”, loyalty “Y”, conditional “W1”, emotional “W2”, epistemic “W3”, and functional values “W4”,

as well as image “W5”, monetary “W6” and non-monetary sacrifices “W7”, and finally, the social value construct “W8”. Given that both Cronbach’s Alfa and CR (Composite Reliability) for each construct are higher than 0.70, as shown in Table 1, the internal consistency reliability of each measure was supported (Nunnally & Bernstein, 1994).

Additionally, the results show that all item loadings are higher than the 0.7 threshold value. Items "W8\_3" and "W7\_1" had the lowest and greatest loadings, respectively, with values of 0.73 and 0.97. All items' communalities are above the required minimum level of 0.50. For all research variables, the AVE (Average Variance Extracted) exceeds the widely accepted value of 0.50. The convergent validity of the constructs in the model is well supported by these findings (Hair et al., 2014). Additionally, two items, "Y\_4" and "Y\_4", were removed from the students' loyalty scale and one item, "X\_4", was removed from the students' trust scale because their outer loadings were below the acceptable value of 0.7. Removing these items improved the composite reliability and the AVE of their respective constructs (Hair et al., 2011).

**Table 1: Assessment of measurement models**

Variables	Validity and reliability assessment criteria				
	Loadings	Communalities	AVE	CR	Cronbach's $\alpha$
X			0.60	0.88	0.83
X_1	0.74	0.55			
X_2	0.78	0.61			
X_3	0.76	0.58			
X_5	0.81	0.66			

X_6	0.77	0.59			
W1			0.68	0.86	0.76
W1_1	0.85	0.72			
W1_2	0.75	0.56			
W1_3	0.86	0.75			
W2			0.73	0.89	0.82
W2_1	0.86	0.74			
W2_2	0.83	0.68			
W2_3	0.88	0.77			
W3			0.68	0.90	0.85
W3_1	0.83	0.68			
W3_2	0.83	0.68			
W3_3	0.83	0.68			
W3_4	0.83	0.69			
W4			0.79	0.92	0.87
W4_1	0.92	0.85			
W4_2	0.87	0.76			
W4_3	0.88	0.77			
W5			0.63	0.90	0.85
W5_1	0.76	0.58			
W5_2	0.81	0.65			
W5_3	0.83	0.68			
W5_4	0.78	0.60			
W5_5	0.80	0.64			
W6			0.83	0.91	0.80
W6_1	0.92	0.84			
W6_2	0.91	0.82			
W7			0.86	0.93	0.86
W7_1	0.97	0.95			
W7_2	0.88	0.78			
W8			0.62	0.87	0.79
W8_1	0.82	0.68			
W8_2	0.84	0.71			
W8_3	0.73	0.53			
W8_4	0.75	0.56			
Y			0.66	0.88	0.82
Y_1	0.82	0.67			
Y_2	0.79	0.62			
Y_3	0.79	0.63			
Y_5	0.84	0.70			

Note: "X" denotes students' trust, "Y" stands for students' loyalty, "W1", "W2", "W3", and "W4" refer to conditional,

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emotional, epistemic, and functional values, respectively. Also, "W5" stands for image, "W6" and "W7" for monetary and non-monetary sacrifices, respectively, and finally, the social value construct is denoted by "W8".

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Finally, discriminant validity has been evaluated using the Fornell-Larcker criterion. The final findings of the Fornell-Larcker criteria are displayed in Table 2 along with the correlations between the constructs in the bottom left triangle and the square root of the constructions' AVE on the diagonal. The results show that all of the variables' square roots of the AVEs are greater than their correlations with other latent variables in the model. These findings provide support for the variables' discriminant validity (Fornell and Larcker, 1981).

Table 2 shows summary statistics and the bivariate correlations between all constructs under consideration. The mean values of all research constructs have fairly small standard deviations and significantly deviate from the five-point Likert scale's neutral option (3) at the 1% level. These results indicate that the participants have positive attitudes toward all variables under consideration (i.e., perceived value, trust, and loyalty).

Table 2: Summary statistics, bivariate correlations, and Fornell-Larcker criterion results

	Mean	Std. dev	X	W1	W2	W3	W4	W5	W6	W7	W8	Y
X	4.01**	0.73	0.77									
W1	3.96**	0.81	0.71**	0.82								
W2	4.04**	0.76	0.59**	0.62**	0.85							
W3	4.05**	0.74	0.72**	0.72**	0.67**	0.83						
W4	4.00**	0.89	0.73**	0.66**	0.62**	0.73**	0.89					
W5	4.02**	0.70	0.67**	0.71**	0.65**	0.72**	0.69**	0.79				
W6	3.88**	0.94	0.66**	0.72**	0.54**	0.62**	0.64**	0.71**	0.91			
W7	3.43**	1.15	0.01	0.17*	0.08	0.08	0.04	0.09	0.05	0.93		
W8	4.09**	0.70	0.68**	0.65**	0.76**	0.71**	0.64**	0.69**	0.54**	0.07	0.79	
Y	4.05**	0.82	0.76**	0.75**	0.63**	0.77**	0.78**	0.73**	0.69**	0.17**	0.63**	0.81

Notes: "X" denotes students' trust, "Y" stands for students' loyalty, "W1", "W2", "W3", and "W4" refer to conditional, emotional, epistemic, and functional values, respectively. Also, "W5" stands for image, "W6" and "W7" for monetary and non-monetary sacrifices, respectively, and finally, the social value construct is denoted by "W8". \*\* and \* refer to statistical significance at the 0.01 and 0.05 levels, respectively.

Moreover, researchers have identified a significant positive and strong relationship at  $p < 0.001$  between students' trust and their loyalty ( $r > 0.49$ ). Researchers have also noticed significant positive and strong relationships at  $p < 0.001$  between all of students' perceived value subdimensions except non-monetary sacrifice (W6) on the one hand and students' loyalty on the other hand (Y), whereas the positive relationship between non-monetary sacrifice dimension and students' loyalty is rather weak ( $r < 0.30$ ) and significant at the 1% level (Cohen, 1988).

### ***Hypotheses testing results.***

To test research hypotheses, the researchers have relied upon the methodology suggested by Hair et al., (2017); Henseler et al., (2009); and Henseler & Fassott, (2010). Table 3 shows PLS results for hypotheses testing.

The  $R^2$  value (i.e., Coefficient of Determination) is the primary criterion utilized to assess the path model. Students' loyalty with  $R^2$

values of 0.63 and 0.79 after including students' perceived value dimensions as moderating variables are considered good evidence of the model's predictive accuracy as both are higher than the suggested value of 0.10 (Falk & Miller, 1992). According to Chin's (1998) guidelines, the Coefficient of Determination values of students' loyalty can be considered moderate and substantial respectively.

Regarding the hypothesis ( $H_1$ ), the PLS results presented in Table 3 reveal that students' trust significantly and positively affects students' loyalty (path coef. = 0.80,  $t = 29.14$ ,  $p < 0.01$ ), leading to support ( $H_1$ ). Therefore, the researchers have concluded that the high levels of students' trust can result in high levels of loyalty to their universities.

**Table 3: hypotheses testing results**

Path		Path coefficient	Standard Error	t  value	p-value	$R^2$	Hypotheses results	testing
X	→ Y (Main effect)	0.80**	0.03	29.14	< 0.001		$H_1$ :	Supported
						0.63		
X	→ Y (Simple effect)	0.29**	0.07	4.21	< 0.001			
X×W1	→ Y	0.03	0.11	0.23	0.82			
X×W2	→ Y	-0.10	0.10	0.95	0.34			
X×W3	→ Y	-0.03	0.13	0.22	0.83			
X×W4	→ Y	0.25*	0.12	2.09	0.04		$H_2$ :	Partially Supported
X×W5	→ Y	0.12	0.15	0.85	0.39			
X×W6	→ Y	-0.19	0.13	1.50	0.14			
X×W6	→ Y	0.004	0.06	0.07	0.95			
X×W8	→ Y	-0.15	0.13	1.11	0.27			
						0.79		

Notes: "X" denotes students' trust, "Y" stands for students' loyalty, "W1", "W2", "W3", and "W4" refer to conditional, emotional, epistemic, and functional values, respectively. Also, "W5" stands for image, "W6" and "W7" for monetary and non-monetary sacrifices, respectively, and finally, the social value construct is denoted by "W8". \*\* and \* refer to statistical significance at the 0.01 and 0.05 levels, respectively.



Regarding the second research hypothesis ( $H_2$ ), the PLS findings presented in Table 3 reveal that for the average students' perceived value dimensions, the students' trust significantly and positively affects their loyalty at  $p < 0.01$ . The findings also indicate that the interaction term ( $X \times W5$ ) and students' loyalty are significantly and positively correlated (path coef. = 0.25,  $t = 2.09$ ,  $p < 0.05$ ). This result means that if the students' perceived functional value becomes higher, the relationship between students' trust and their loyalty would increase by the size of the interaction term (i.e., 0.25). Hence, when students' perceived functional value gets higher, students' trust becomes more important for the explanation of students' loyalty. Therefore, the researchers have concluded that the students' perceived functional value has a significant and positive moderating effect on the relationship between students' trust and their loyalty.

Finally, the results reveal that the relationships between the rest of the interaction terms on the one hand, and students' loyalty on the other hand are insignificant at 0.05 level. Therefore, the researchers do not find any support for significant moderating effects of the rest of students' perceived value dimensions (i.e., conditional, emotional, and epistemic values, as well as image, monetary and non-monetary sacrifices, and finally, the social value) on the relationship between students' trust and their loyalty. These results partially support ( $H_2$ ) only regarding students' perceived functional value.

## 7. Discussion

The results of this study largely align with the foundational ideas set forth by authors in the literature review, particularly regarding the roles of trust and perceived value in driving student loyalty. Wang and Emurian's (2005) work positioned trust as a construct with both cognitive and affective elements that play a critical role in loyalty. This study's findings affirm that trust significantly influences loyalty among students in Egyptian HEIs, supporting the view that trust is both knowledge-based and emotionally driven. Similarly, Ghosh et al. (2001) discussed various factors, including perceived expertise, friendliness, and openness that foster student trust. While this study does not analyze these factors individually, its confirmation of trust as a key predictor of loyalty is consistent with Ghosh et al.'s conceptualization of trust as a multifaceted construct central to HEIs.

The study also draws parallels with Hennig et al. (2001), who suggested that student loyalty depends on quality of teaching, trust in institutional staff, and student commitment. While Hennig's framework emphasizes quality and affective dimensions, this study adds nuance by identifying functional value as a significant moderator in the trust-loyalty link. This finding suggests that, in the HEI context, tangible, practical benefits like employability may take precedence over affective components in loyalty formation. This functional emphasis, thus, provides a fresh perspective on Hennig's broader framework by

prioritizing perceived value aspects that are more job- and outcome-oriented.

Building on the concept of perceived value, Parasuraman and Grewal (2000) highlighted its importance in reducing customers' inclination to seek alternatives, which in turn fosters loyalty. This study aligns with their emphasis on perceived value but reveals that only functional value, not other dimensions like emotional or epistemic value, significantly moderates the trust-loyalty relationship in Egyptian HEIs. This finding suggests that while perceived value does indeed contribute to loyalty, its impact may vary based on the context and specific components of perceived value, such as functional over emotional benefits.

Similarly, Sirdeshmukh et al. (2002) argued that trust and perceived value together foster loyalty, with high perceived value enhancing the trust-loyalty relationship. The current study's results support this, particularly regarding functional value, which is found to amplify the impact of trust on loyalty. However, other value dimensions like epistemic and social value do not show the same moderating effects, diverging from Sirdeshmukh's general stance that perceived value uniformly strengthens trust-driven loyalty. This differentiation in the moderating effects of perceived value dimensions underscores the importance of examining each value type's specific role within the educational context.

In a similar vein, Annamdevula and Bellamkonda (2016) emphasized that student satisfaction mediates the relationship between service quality and loyalty. This study aligns with the critical role of trust in loyalty but introduces a specific moderating effect of perceived functional value, suggesting that functional benefits may play an even greater role in strengthening trust-driven loyalty than general satisfaction alone. This finding builds on Annamdevula and Bellamkonda's model by providing a deeper understanding of how specific dimensions of perceived value, rather than satisfaction broadly, influence loyalty.

Further, Carvalho and Mota (2010) argued that trust is a vital determinant of value in student-HEI relationships, directly impacting loyalty. This study agrees, showing that trust significantly impacts loyalty, while functional value moderates this relationship, emphasizing the importance of tangible, practical benefits in student loyalty within HEIs. This finding underscores the notion that students prioritize educational outcomes that enhance their employability and real-world skills, thereby reinforcing Carvalho and Mota's views on trust as a key loyalty driver.

Finally, Snijders et al. (2019) found that trust affects student engagement and alumni loyalty within HEIs. This study's results are consistent with their view on trust's influence on loyalty, although it focuses on current student loyalty and the moderating role of perceived value rather than alumni engagement. By

extending the discussion to how functional value enhances trust-driven loyalty among current students, the study broadens the understanding of loyalty dynamics in HEIs, adding depth to Snijders et al.'s findings on the trust-loyalty relationship within educational settings.

In conclusion, while the study generally supports existing literature on the role of trust and perceived value in fostering loyalty, it advances the discourse by highlighting functional value as a uniquely significant moderator. This suggests that, in the context of Egyptian HEIs, practical and outcome-focused aspects of education may be more influential in loyalty formation than previously emphasized, providing valuable insights for both academic and practical applications in higher education management.

## **8. Conclusion.**

Three critical conclusions can be drawn from the theorization and empirical analysis undertaken by this research paper. First, customer loyalty is a major marketing performance benchmark and key driver for effective management of all marketing decisions and policies made by higher education institution marketers and leaders. Nevertheless, the underlying dimensions and categories of loyalty within the specific context of higher education markets need to be revisited and re-conceptualized to address genuine aspects of loyalty such as loyalty across

undergraduate and postgraduate programs, loyalty among students, parents and employers and loyalty across global higher education market.

Second, this research has shown that trust can be an overriding and integrated total solution to key marketing challenges within the higher education industry for case in point this study has demonstrated the delivered management of trust can help higher education institutions handle competitively important issues like varying quality, concept, customer values, complicated buyer behavior and significant demographics consequences.

Third, the perceived value concept proved through this research to be a significant adaptive determinant of the magnitude of trust levels to loyalty levels. Thus, the forces driven by perceived value can be used to optimize the ROI in trust leading to unexplored horizons of loyalty for higher education institutions.

So, the wrap up the controversies in the essence and interrelationships among trust, loyalty and perceived value should open several rich and insightful research streams for reimagining their core substance and interdependences within higher education

## **9. Research Limitations and Recommendation for further research:**

The findings of the study are limited to the Egyptian universities, undergraduate programs and time contexts. Three clear extensions of this research are: First, changing the empirical higher education context to other kinds of universities, programs, countries and educational systems. Second, the interrelationships and moderation between different buyer behavior variables such as information search, post purchase evaluation and patronage motives. Third, various methodologies ought to be considered to examine marketing variables within a unique context like higher education industry due to their multidimensional and insightful essence. Experimental designs and qualitative research in the form of protocol analysis can be argued to provide a fresh and yet rigorous perspective on marketing variables and phenomena in higher education markets.

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