

# Precursors and Outcomes of Perceived Value in Achieving Student Loyalty in Open Distance Electronic Learning Institutions

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## Abstract

The Covid-19 pandemic resulted in contact universities entering the distance learning market, creating new competition for Open Distance Electronic Learning (ODEL) institutions. To achieve sustainable competitive advantage, these institutions need to formulate sound strategies to attract and retain students. This study investigated the precursors and outcomes of perceived value in achieving student loyalty in ODEL institutions. A quantitative approach was employed to gather data using self-administered online questionnaires, with 1 430 responses. The partial least squares structural equation modeling technique was used to test the proposed model. The results indicate that an ODEL institution's reputation and service quality positively influence student value, while the outcomes are trust, commitment, and student loyalty. However, institutional reputation was found to have more influence on student value than service quality, and commitment had more influence on loyalty than trust. While a number of studies have been conducted on the relationship between the variables/constructs, service quality and reputation as determinants of customer value and trust and commitment's influence on loyalty, they do not show the differences in the magnitude of each variable. This study showed that although all these factors correlate and positively influence one another, there are major differences in the magnitude of influence. It is thus recommended that ODEL institutions should formulate strategies aimed at enhancing institutional reputation, value, and student commitment in order to retain student loyalty.

**Key words:** Service quality, institutional reputation, open distance electronic learning, perceived value, commitment

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La pandémie de Covid-19 a entraîné l'entrée des universités de contact sur le marché de l'enseignement à distance, créant ainsi une nouvelle concurrence pour les institutions d'Enseignement Electronique à Distance Ouvert (EEDO). Pour obtenir un avantage concurrentiel durable, ces institutions doivent formuler des stratégies solides pour attirer et retenir les étudiants. Cette étude a examiné les précurseurs et les résultats de la valeur perçue dans la fidélisation des étudiants dans les institutions ODeL. Une approche quantitative a été utilisée pour recueillir des données à l'aide de questionnaires en ligne auto-administrés, avec 1 430 réponses. La technique de modélisation par équations structurelles des moindres carrés partiels a été utilisée pour tester le modèle proposé. Les résultats indiquent que la réputation et la qualité du service d'une institution d'enseignement ouvert et à distance influencent positivement la valeur des étudiants, tandis que les résultats sont la confiance, l'engagement et la fidélité des étudiants. Cependant, la réputation de l'établissement s'est avérée avoir plus d'influence sur la valeur de l'étudiant que la qualité du service, et l'engagement avait plus d'influence sur la fidélité que la confiance. Bien qu'un certain nombre d'études aient été menées sur la relation entre les variables/constructions que sont la qualité de service et la réputation en tant que déterminants de la valeur client, et l'influence de la confiance et de l'engagement sur la fidélité, elles ne montrent pas les différences de l'ampleur de chaque variable. Cette étude a montré que, bien que tous ces facteurs soient corrélés et s'influencent positivement les uns les autres, il existe des différences majeures dans l'ampleur de l'influence. Il est donc recommandé que les institutions ODeL formulent des stratégies visant à améliorer la réputation institutionnelle, la valeur et l'engagement des étudiants afin de les fidéliser.

**Mots clés:** qualité de service, réputation institutionnelle, enseignement électronique ouvert et à distance, valeur perçue, engagement

## 1. Introduction

Acknowledging the competitive environment and measuring how they manage customer relationships is critical to every organisation, including open distance e-educational institutions in the higher education sector in South Africa and globally (SA Department of Higher Education and Training, 2020). Given worldwide perceptions of the importance of higher education, the value of the education delivered by higher education

institutions, especially Open Distance Electronic Learning (ODEL) is coming under increased scrutiny by students, potential employers and parents (Bassi, 2019). Universities and colleges that offer ODeL are increasingly recognising and considering their students' demands and expectations (Sánchez-Elvira and Simpson, 2018). Given the intense competition in ODeL, institutions aim to deliver superior service quality to their students to differentiate themselves from their competitors (Cloete, 2017). A loyal student is a source of competitive advantage as this results in positive word-of-mouth communication, retention, and repeat. Creating sustainable advantage by delivering superior customer value is a competitive achievement (Psomas and Antony, 2017). Understanding student loyalty and perceived value are regarded as the most important issues when formulating strategic management plans to ensure an ODeL institution's successful long-term performance (Banerjee, 2018). This study aimed to determine the influence of service quality and institutional reputation on student value as well as value's effect on loyalty.

### Background

Open Distance Electronic Learning is the fastest growing system in the higher education sector (Council on Higher Education, 2020; Jansen, 2018; Matsolo et al., 2018). In order to sustain such growth, ODeL institutions need to pay more attention to student loyalty.

The rapid growth of the ODeL system is due to advancements in information technology through the Internet, and the use of internet devices (Cloete, 2017). It uses combined-media courseware that includes Microsoft team platforms, print, television broadcasts, videos and audio recordings, and radio (University of South Africa, 2019). Students and teachers are able to participate in all school activities initiated by their institution such as online workshops, tutorials, seminars, and other accelerated online undergraduate and postgraduate support programmes without entering the physical classroom or coming into contact with one another (Sánchez-Elvira Paniagua and Simpson, 2018). This benefits students and universities (University of South Africa, 2019) and offers students an additional virtual learning channel, convenience, and flexible learning (Case et al., 2018).

Furthermore, ODeL institutions integrate with global systems, and avoid the costs incurred by face-to-face interactive education, and

investment in infrastructure. However, such institutions also confront intense international competition (Cloete et al., 2017), leading to the challenge of student retention (Cooper and Schindler, 2014). The challenges confronting students include internet connections, the cost of data, and affordability of laptops (University of South Africa, 2019). Thus, for ODeL institutions to survive and compete globally, there is a need to formulate strategies that enhance student loyalty (Subrahmanyam, 2017).

### Problem Statement

An ODeL institution that seeks to survive in a highly competitive environment needs to keep abreast of current relationship marketing strategies (Curth et al., 2019; Helgesen, 2008) in order to build student loyalty and develop fruitful long-term relationships between students and the institution (Pedro et al., 2017). Various studies including Moore (2012); Mendez (2009); Henning-Thurua (2001); Siu et al. (2013); Chinomona and Bikissa-Macongue (2021); Kassanig (2018); and Mohammed (2012) have been conducted on customer value, and student satisfaction. However, they did not focus on the precursors and outcomes of student value. This study aimed to fill this gap by determining the precursors and outcomes of perceived value in achieving student loyalty in an ODeL institution.

### Objectives

The study's objectives were to:

- Determine if service quality influences student loyalty
- Determine if institutional reputation influences student loyalty
- Determine if perceived value mediates the effects of service quality, and institutional reputation on student loyalty.

### 2. Literature Review and Hypotheses Development

Perceived value has become an attractive concept in marketing because it describes consumer buying behaviour (Naveen et al., 2014; Solimun et al., 2017). A growing body of empirical studies supports this concept that involves business institutions achieving a competitive advantage by providing superior value services to consumers (Sweeney and Soutar, 2001; Lin and Wang, 2006; Chen et al., 2008; Kuo et al., 2009; Lu and Hsiao, 2010). Keshavarz et al. (2017) also note that perceived value has become a new strategic imperative for higher education institutions.

However, there is no consensus on what constitutes student value, with definitions ranging from anticipated benefits to quality, monetary value, and economic signals of perceived value in an organisation (Lin and Wang, 2006; Kim et al., 2007; Wang, 2008; Kuo et al., 2009; Lu and Hsiao, 2010). In our study, perceived value was defined as overall student assessment of the efficacy of learning and training services based on their perceptions of what is offered (Naveen et al., 2014; Solimun et al., 2017).

The study proposes a research model based on the theoretical literature that is depicted in Figure 1 below. The model posits that service quality and institutional reputation influence perceived value, and that the outcomes are commitment, trust, and loyalty.

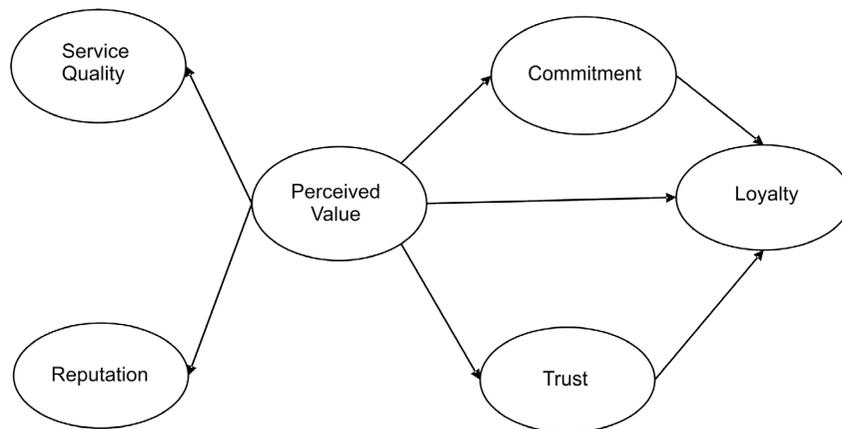


Figure 1: Proposed research model

### Service Quality and Student Value

The service quality approach that is used extensively in marketing research was developed and improved by Parasuraman and Zeithmal (1989). Parasuraman (1989) noted that the service quality model measures service quality, including tangibles, assurance, empathy, reliability, and responsiveness as the service aspects. These aspects should be considered (Kotler and Keller, 2016). Harvey and Green (1993) showed that service quality influences student loyalty to private higher education institutions in Japan (Matsolo et al., 2018), while Cronin (2000), Choi (2004), Ryu et al. (2008), and Kuo (2009) posited that service quality is an antecedent of

undergraduate students' perceptions of value. Other studies revealed that service quality is a positive indicator that encourages students to pursue postgraduate studies (Silvestri et al., 2017). However, these studies were based on samples with characteristics that are dissimilar to those in South Africa. Based on the literature on service quality and customer value from different perspectives, the following hypothesis was proposed:

H1 Service quality has a positive influence on student value.

### Institutional Reputation and Student Value

Multiple elements (external and internal), including the brand name of the institution interact over time to produce institutional reputation (Yarborough and Fedesco, 2020). Forbrun and Van Riel (2003) note that visibility, legitimacy, uniqueness, consistency, and transparency influence corporate reputation. Research has shown that an educational institution's reputation can be enhanced by direct or indirect experience of quality service and mediated student perceived value (Wali et al., 2015). The moderating role of the ODeL institution and information about it is developed through different channels (Leontyeva, 2018). According to Sevier (1994), students choose an institution based on their perceptions of it. Horizontal reputation involves students comparing specific characteristics and aspects of institutions that they would mention to someone else (Matsolo et al., 2018). In contrast, vertical reputation describes students' positive or negative sentiments concerning the higher education institution (Kimotho, 2018). Institutional reputation has a positive influence on student perceived value (Bassi, 2019). Thus, when students are satisfied with an ODeL institution, they would likely demonstrate a positive attitude towards it (Leontyeva, 2018). Bromley (2000), Gotsi and Wilson (2001), and Graing and Hung (2002) concur and argue that the on-going relationship between the customer and service provider leads to student value.

In view of the above, it was proposed that:

H2 Institutional reputation has a positive influence on student value.

### Value and Commitment

Commitment stems from one's belief that a relationship is so important that it is necessary to maintain it (Morgani and Hunt, 1994). Both parties in the relationship must believe that it is worth making an effort to sustain

it for the foreseeable future (Keiningham et al., 2015). Commitment is ongoing and it creates emotional attachment to an organisation (El-Manstrly and Dahlia, 2016). Long-term service quality and extensive customer learning is necessary because students face various challenges during their studies at ODeL institutions that may result in them reformulating their academic goals and re-evaluating their relationship with the institution (Rosenzweig et al., 2016). Mmatli (2019) showed that goal commitment has a positive and direct relationship with relationship quality, which impacts customer satisfaction. Wali et al. (2015) also highlighted the need for ODeL institutions to understand students' commitment to achieving their individual goals.

For the purposes of this study, commitment was regarded as effective commitment where positive attachment creates the desire to care about and maintain the relationship, and be proud of it (Mpisinganjira et al., 2014). Various studies have shown that student commitment positively impacts student loyalty in higher education (Bowden, 2011; Moore, 2012; Mendez, 2009; Henning-Thurua, 2001). For instance, Siu et al. (2013), Harrison et al. (2012), Wu et al. (2012), Hur et al. (2010), and Thurau (2001) found that commitment has a strong relationship with and impact on student loyalty. Therefore, the following hypotheses were developed:

- H3 Value has a positive influence on commitment.
- H4 Commitment has a positive influence on loyalty.

### Value and Trust

A student's trust in a higher education institution is considered as his/her confidence in its personnel based on the institution's integrity and reliability (Nevzat et al., 2016). In turn, trust engenders loyalty (Naami and Abdollah, et al., 2017). Elliot and Healy (2001) found that student trust has a significant impact on student loyalty, while Henni-Thurau (2002) concluded that it positively influences student satisfaction. These findings are supported by Garcia and Valor (2007), Thompson and Thompson (2003), and Sarwar et al. (2012).

In order to retain students, an institution needs to develop solid and predictable perceived value for its future activities (Mostert et al., 2016). According to Kotler et al. (2016), there is a relationship between trust and commitment in that a customer who trusts a service provider and is committed to it is likely to be loyal. It is thus important for service

providers to build customer trust by providing the best services possible in the best way (Jansen, 2018).

- Based on these insights, the study developed the following hypotheses:
- H5 Value has a positive influence on trust.
- H6 Trust has a positive influence on loyalty.

### Perceived Value Influences Commitment, Trust, and Loyalty

According to Babaei et al. (2015), the concept of value refers to students' ability to perceive the significance of engaging in certain tasks. Thus, when students engage in an assignment, exercise, or other activity, they have a clear understanding of the benefits of that particular task. Perception of value is the rational mediator between service and any resource (Zamani and Harper, 2019). The literature shows that perceived value has a significant impact on student loyalty to higher education institutions (Carvalho and Mota, 2010; Fernandez, 2012). The more students deem the education they receive as worthy based on the quality of services, the more satisfaction they derive, leading them to become loyal to the institution (Zamani and Harper, 2019).

Based on the literature, the following hypotheses were developed:

- H7 Value has a positive influence on loyalty.
- H8 Value mediates the effect of service quality and reputation on loyalty.

### 3. Research Methodology

A quantitative approach using the survey method was employed and data were gathered by means of a self-administered questionnaire administered via an online platform due to the Covid-19 pandemic, which made personal interviews impossible.

The study population consisted of all registered students (350 000) in the largest ODeL institution on the continent of Africa. This institution was selected because, in addition to being the largest on the continent, it has a global student population that spans across the African continent to Asia, Europe, and America (Banerjee, 2018).

Purposive and convenience sampling methods were used to select the respondents. All registered students in the College of Economic and Management Sciences were targeted and an email with a link was sent to each student.

A seven-point Likert scale was employed to measure the constructs ranging from 1 – ‘strongly disagree’ to 7 – ‘strongly agree’. The questionnaire was divided into three parts: Part A introduced the questionnaire; Part B gathered demographic data on gender, age, and the course/degree the student was studying, and Part C comprised questions about the study variables.

Ethical approval to conduct the study was obtained from the Department of Marketing and Retail Management (Ref. 2020\_MRM\_008) and the university (Research Permission Sub-Committee), with reference number 2020\_RPSC\_040. The purpose of ethical clearance is to ensure that research complies with the university’s ethical guidelines and that the participants’ rights are protected.

#### 4. Results and Discussion

The sample’s and constructs’ descriptive characteristics were analysed using the Statistical Package for the Social Sciences, version 26. Table 1 presents the results of the descriptive characteristics of the sample. Of the 1 439 participants, 917 (63.7%) were male, 505 (35.1%) females, and 17 (1.2%) undisclosed gender.

Most participants (38.2%) were aged between 21 and 30, followed by 37.2% between the ages of 31 and 40. In total, more than two-thirds of the sample comprised participants aged between 21 and 40. Moreover, 66.1% were African, followed by whites (15.45%), coloureds (7.7%), Indians (6.7), and Asians (0.3). Lastly, 36.7% of the participants had enrolled for a higher certificate, followed by 32.5% for a bachelor’s degree, 7.6% for an honours degree, 1.3% for a Master’s, and 0.6% for a doctoral degree. The sample thus included students registered for all the institution’s major qualifications.

**Table 1:** Descriptive Statistics of the sample

Sample characteristics		Frequency	Percent
Gender	Male	917	63.7
	Female	505	35.1
	Prefer not to say	17	1.2

Age	18 - 20 years	57	4.0
	21 - 30 years	549	38.2
	31 - 40 years	536	37.2
	41 - 50 years	238	16.5
	51-65 years	59	4.1
Race group	African	951	66.1
	Asian	4	.3
	Coloured	111	7.7
	Indian	97	6.7
	White	222	15.4
	I prefer not to say	54	3.8
Level of qualification	Higher Certificate	528	36.7
	Diploma	308	21.4
	Degree	467	32.5
	Honours	110	7.6
	Masters	18	1.3
	PhD/Doctorate	8	.6

#### Measurement Model Analysis

The analysis of the measurement model involved assessing its convergent validity and discriminant validity. In assessing convergent validity, standardised factor loadings, composite reliability, and average factor extracted were observed. The results of the convergent validity analysis are presented in Table 2. According to Hair et al. (2020), for convergent validity to be established, the standardised factor loading should be greater than 0.708, the composite reliability should exceed 0.7, and the average variance extracted (AVE) should be greater than 0.5. The results presented in Table 2 show that all the standardised factor loadings for the measures of the constructs are greater than the 0.708 threshold. The estimates for the composite reliability for the constructs are greater than 0.7, with 0.904 for commitment being the least. In addition, the AVE for all the constructs exceeds the 0.5 threshold. The results support the convergent validity of the measurement model.

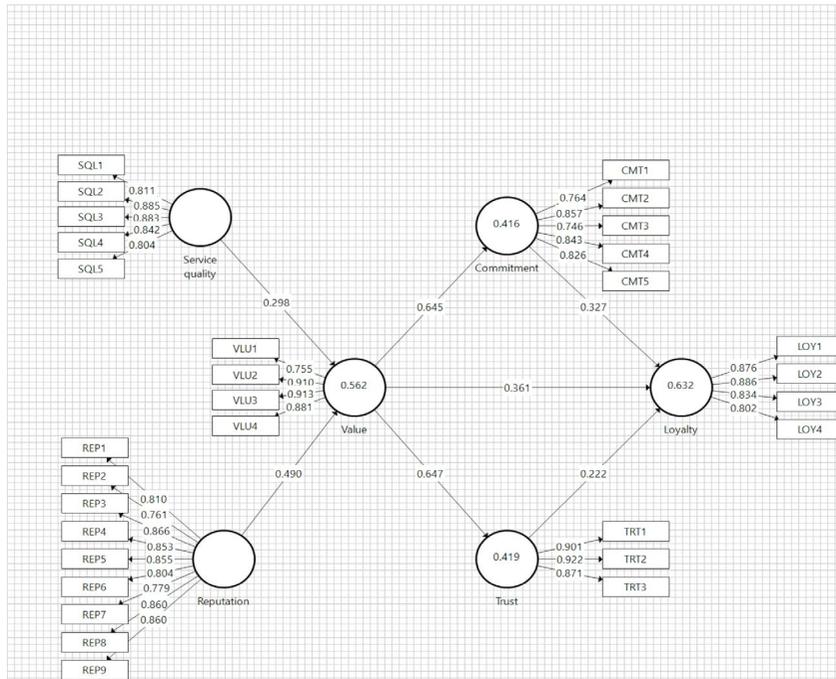


Figure 2: Results of the PLS model analysis

Table 2: Convergent validity of the measurement model

	Factor Loading	Composite reliability	Average Factor loading (AVE)
Commitment		0.904	0.654
CMT1	0.764		
CMT2	0.857		
CMT3	0.746		
CMT4	0.843		
CMT5	0.826		
Loyalty		0.912	0.723
LOY1	0.876		
LOY2	0.886		
LOY3	0.834		
LOY4	0.802		
Reputation		0.952	0.686

REP1	0.810		
REP2	0.761		
REP3	0.866		
REP4	0.853		
REP5	0.855		
REP6	0.804		
REP7	0.779		
REP8	0.860		
REP9	0.860		
Service quality		0.926	0.715
SQL1	0.811		
SQL2	0.885		
SQL3	0.883		
SQL4	0.842		
SQL5	0.804		
Trust		0.926	0.807
TRT1	0.901		
TRT2	0.922		
TRT3	0.871		
Value		0.923	0.752
VLU1	0.755		
VLU2	0.910		
VLU3	0.913		
VLU4	0.881		

After confirming the convergent validity of the measurement model, its discriminant validity was assessed using two generally accepted techniques. First, the Fornell and Larcker (1988) technique was applied. According to this technique, discriminant validity is said to be achieved when the square root of the AVEs exceeds the inter-construct correlations. The results presented in Table 3 suggest that the square root of the AVEs is greater than the inter-construct correlations, thus providing the first evidence of discriminant validity of the measurement model. The heterotrait-monotrait (HTMT) ratio of correlations is considered to be a more robust means of testing discriminant validity (Henseler et al., 2015). According to the HTMT technique, discriminant validity is obtained when

the HTMT is less than 0.9 (Henseler et al., 2015). The results presented in Table 3 show that the highest HTMT correlation is 0.867. Given that this is less than the recommended threshold of 0.9, it provides additional evidence of the discriminant validity of the measurement. Overall, the results of the discriminant validity assessment using both the Fornell and Larcker and HTMT techniques provide support for the discriminant validity of the measurement model.

Table 3: Discriminant validity assessment

Construct	Mean	Standard deviation	Correlation Matrix						
			1	2	3	4	5	6	
1   Commitment	6.019	.961	<b>0.809</b>	0.779	0.724	0.656	0.680	0.711	
2   Loyalty	5.298	1.175	0.696	<b>0.850</b>	0.777	0.753	0.736	0.788	
3   Reputation	5.402	1.126	0.666	0.713	<b>0.828</b>	0.867	0.781	0.776	
4   Service quality	5.402	1.126	0.597	0.678	0.799	<b>0.846</b>	0.860	0.753	
5   Trust	5.219	1.204	0.611	0.656	0.711	0.764	<b>0.898</b>	0.714	
6   Value	5.447	1.221	0.645	0.716	0.728	0.689	0.647	<b>0.867</b>	

\*Bold diagonal estimates are the square root of the AVEs. Values above the diagonal estimates are the HTMT ratio of corrections and values below the inter-factor correlations

Hypotheses Testing

Confirmation of the validity of the measurement model paved the way for the analysis of the proposed model to test the research hypotheses. However, before doing so, the threat of collinearity among the antecedents of the dependent constructs was assessed using the variance inflation factors (VIF). According to Hair et al. (2020), collinearity is not critical when the VIF estimates are less than 3. The VIF estimates for the study were between 1 and 2.074. Given that these are less than 3, collinearity was not important for the assessment of the proposed model.

In light of the above, the proposed model was tested for the significance of the hypotheses, coefficient of determination (R<sup>2</sup>) for the endogenous constructs, and the strength of the effect sizes. The results of these analyses are presented in Table 4 and Figures 2 and 3.

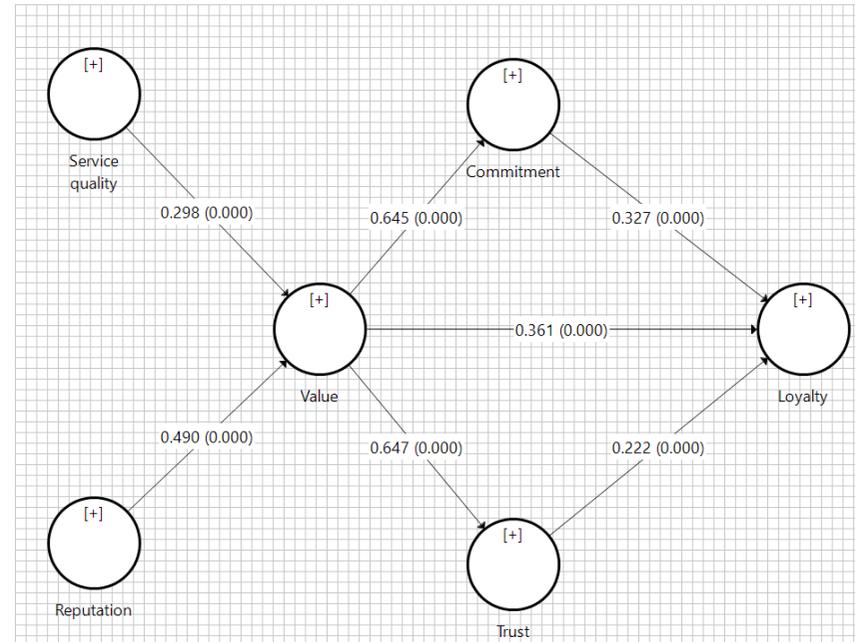


Figure 3: Strengths of the effect sizes

Table 4: Hypothesis testing

Hypotheses	Path coefficient	95% Bias Corrected CI	Supported?	f <sup>2</sup>	Effect size
H1   Service Quality → Value	0.298*	[0.225; 0.378]	Yes	0.074	Small
H2   Reputation → Value	0.490*	[0.417; 0.557]	Yes	0.198	Medium
H3   Value → Commitment	0.645*	[0.602; 0.685]	Yes	0.711	Large
H4   Commitment → Loyalty	0.327*	[0.256; 0.394]	Yes	0.151	Medium
H5   Value → Trust	0.647*	[0.611; 0.681]	Yes	0.721	Large
H6   Trust → Loyalty	0.222*	[0.176; 0.286]	Yes	0.069	Small
H7   Value → Loyalty	0.361*	[0.296; 0.415]	Yes	0.171	Medium

f<sup>2</sup> (effect size): estimates above 0.35 = large effect; 0.15–0.35 = medium effect and 0.02–0.15 small effect (Cohen, 1998).

According to the results, students’ perception of the service quality of the ODeL institution ( $\beta=0.298$ ;  $p<0.001$ ) and of its reputation ( $\beta=0.490$ ,  $p<0.001$ ) are significant predictors of their value perception, thus providing

support for H1 and H2. The results further show that the perceived service quality and reputation of the ODeL institution explains 56.2% of the variance in students' perception of the value they receive from it. Interestingly, the perceived reputation of the ODeL institution is a stronger predictor of perceived value than service quality. The results further show that perceived value significantly predicts students' commitment to the ODeL institution ( $\beta=0.645$ ,  $p<0.001$ ) and their trust in it ( $\beta=0.647$ ,  $p<0.001$ ). These results support both H3 and H4. Furthermore, 41.6% of the variance in commitment is explained by perceived value and 41.9% of the variance in trust in the ODeL institution is explained by students' perception of value. The results show that students' loyalty to the ODeL institution is significantly and positively predicted by their commitment to ( $\beta=0.327$ ,  $p<0.001$ ) and trust in it ( $\beta=0.322$ ,  $p<0.001$ ), thus providing statistical support for H5 and H6. Lastly, perceived value significantly and positively predicts students' loyalty to the ODeL institution ( $\beta=0.361$ ,  $p<0.001$ ). According to the results, commitment and trust explain 63.2% of the variance in students' loyalty to the ODeL institution.

Zhao et al.'s (2010) recommendation was followed to examine the extent to which perceived value mediates the relationship between service quality and trust, and between reputation and commitment. According to Zhao et al. (2010), mediation exists when the indirect effect is significant. The mediation is said to be partial when both the direct and indirect effects are significant. However, when the direct effect is not significant, but the indirect effect is significant, full mediation exists. The results of the mediation analysis are presented in Table 5

**Table 5:** Results of mediation analysis

Relationship	Direct effect	Indirect effect	Total effect	Mediation
Service quality → trust	0.766		0.959	Yes, partial
Service quality → value → trust		0.193		
Reputation → commitment	0.668		0.984	Yes, partial
Reputation → value → commitment		0.316		

According to the results, the indirect effect of perceived reputation on students' commitment to the ODeL institution is significant ( $\beta=0.316$ ;  $p<0.001$ ), thus providing evidence of mediation. Given that the direct

effect of perceived reputation on commitment is significant ( $\beta=0.668$ ;  $p<0.001$ ), it can be said that perceived value partially mediates the impact of perceived reputation on students' commitment to the ODeL institution. Similarly, the results show that the indirect relationship between service quality and trust is significant ( $\beta=0.193$ ,  $p<0.001$ ), thus providing evidence of significant mediation. In terms of the type of mediation, given that the direct effect of service quality on trust is significant ( $\beta=0.766$ ;  $p<0.001$ ), perceived value partially moderates the impact of service on trust.

## 5. Conclusion

### Academic Contributions

Various studies have been conducted on the relationship between the variables/constructs, service quality and reputation as determinants of customer value and trust and commitment's influence on loyalty (Morgan and Hunt, 1994; Mpingangira et al., 2014; Mbango and Mmatli, 2019; Moore, 2012; Mendez, 2009; Henning-Thurua, 2001; Siu et al., 2013; Chinomona and Bikissa-Macongue, 2021; Kassanig, 2018; Mohammed, 2012). However, these studies do not show the differences in the magnitude of each variable. This study shows that although all the factors considered correlate and have a positive influence on one another, there are major differences in the magnitude of influence. The results show that an ODeL institution's reputation and service quality positively influence student value, while the outcomes are trust, commitment, and student loyalty. However, the findings indicate that institutional reputation (0.490) has more influence on student value than service quality (0.298). Perceived value (0.645) has more influence on student loyalty than trust (0.222), while commitment has more influence on loyalty than trust.

The results reveal that there is a mediation effect of value on service quality to trust, reputation to loyalty, service quality to commitment and reputation to trust. This is consistent with Mostert et al. (2016) and Kotler et al. (2016). Thus, the study provides evidence that student perceived value plays a central role in achieving student loyalty in ODeL institutions. These institutions therefore need to strategise ways to achieve student value.

### Managerial Implications

The following managerial strategies are recommended for an ODeL institution to achieve student loyalty:

1. Institutional reputation:
  - Build the brand image
  - Offer quality programmes
  - Implement effective communication strategies
  - Enhance graduate employability
  - Employ academics of a high standard
  - Invest continuously in teaching technological advancements
2. Value creation:
  - Offer affordable programmes
  - Provide an excellent student experience
  - Provide value for money
3. Commitment from students:
  - Create an atmosphere that is conducive for studying
  - Create simple learning platforms
4. Service quality:
  - Programmes must be of an international standard
  - Educational facilities must be of global standard
  - Services offered must be of a high standard
5. Gain trust:
  - Formulate and implement strategies to build institutional integrity
  - Keep promises made to students
  - Prioritise the interests of students

### Limitations and Suggestions for Future Studies

One of the limitations is that the sample for this study was drawn from one public ODeL institution in the Gauteng province of South Africa. Future studies could include a broad spectrum of ODeL institutions. To further improve on the study's contributions, future research could incorporate cultural and satisfaction factors. The study could also be replicated in other sectors of the economy to determine the generalisability of the conclusions. Lastly, future studies could consider qualitative research to gain in-depth understanding of student perceptions.

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