



Impacts Of Perceived-Value And Key Features Of Distance Education On Marketing-Students' Overall-Satisfaction

Osama Ahmed Abdelkader Associate professor of marketing, Marketing department, College of Applied Studies and Community Service Imam Abdul Rahman Bin Faisal University, Dammam, Saudi Arabia Email: oakader@iau.edu.sa - ORCID:0000-0003-4915-2593

Abstract:

There are a set of lessons to be learned from the COVID-19 crisis, and one of them is to always recognize the importance and necessity of distance education (DE), on the long run not just during crises. The previous studies since the outbreak of this crisis focused on the damages and negative aspects of that epidemic, so a significant research gap has emerged represented in the need to explore the positive aspects of this crisis. Therefore, this paper aims to measure the impact of perceived value (PV) of DE on marketing-students' satisfaction, according to gender and education level. The current study used an online survey built on Google Form; and data were collected electronically from 2348 participants. The research instrument based on two major components; published items previously and suggested. The collected data were analyzed on SPSS, and the multiple regression model was used in this study to explore the key factors impacting on marketing-students' overall-satisfaction (OS) with DE. The paper provides a set of results and recommendations that support academics and practitioners in teaching and learning marketing courses, at distance. Moreover, the study provides contributions that may help in better understanding of key factors affecting the OS of stakeholders with DE. The article proposes variety future ideas of research to explore other lessons learned from this crisis, and the additional advantages of this educational manner on other disciplines.

Keyword: Teaching and learning, distance education, marketing, perceived value, satisfaction.

PV	Perceived Value
OS	Overall-satisfaction
DE	Distance Education
TL	Teaching and Learning
KF	Key Features

Notations:

1. Introduction:

Since the emergence of Covid 19 at the end of 2019, and through the declaration of the World Health Organization WHO as a pandemic disease in March 2020, and then considering it a global epidemic, the world has entered a real crisis in several areas was increased dramatically, including education[1]. During this critical period, all educational programs have been provided based on DE to more than 1.5 billion students annually during the period of the Covid 19 epidemic[2]. This included all areas of specialization, not only theoretical disciplines (e.g., language [3], journalism[4], social sciences [5]), but practical disciplines as well (e.g., sports [6], medicine[1], engineering[7], pharmacy[8], surgery[9], and anatomy [10]) at all levels of study in schools, universities, and postgraduate [11]. There are around 4.66 billion active users on internet, which represents 60% of earth populations[4][12][13][14]. Covid-19 crisis has led to increased attention rapidly to the importance of online transactions in several essential areas including teaching and learning. Web Of Science WOS database statistics indicate that the number of published manuscripts about distance education has doubled significantly due to the Corona crisis around 100% in 2021 to reach 351 manuscripts compared to 2019, whenever 4755 manuscripts were published during the period 2012-2021[15]. However, previous literatures may have focused more on the negative aspects not on analyzing OS with this educational manner in various disciplines. Just as the damage caused by the crisis cannot be ignored, it is also important to explore the positive aspects and lessons learned during that period. One of the main aspects affected by the Corona epidemic is teaching and learning[16], at distance. DE mode represents one of the contemporary practices of the concept “Lifelong Learning”, but it has become inevitable during the crisis[17]. It is possible that the PV of DE has been affected during this crisis, hence, it may have affected the OS of students with DE. To justify the reasons for choosing the field of application of the current study, there is a rapidly increasing global interest in marketing[18]. Figure 1 shows the increased curve of published manuscripts globally during the last 25 years from 1987 to 2021, related to “marketing” term, among more than 928,455 published manuscripts between the years 1900 and 2021[15].

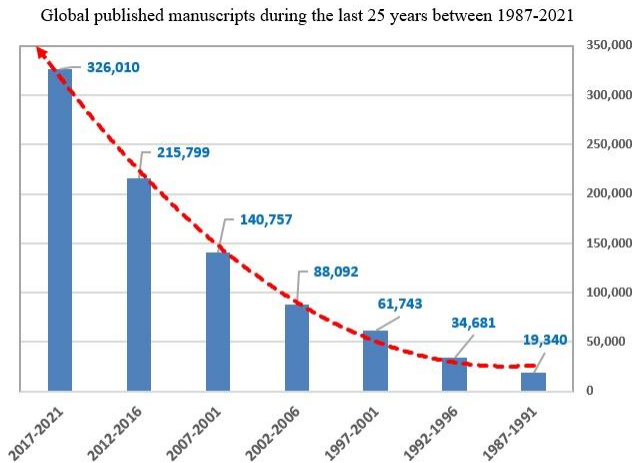


Figure 1: Inclusion of the word "marketing" in manuscripts published during the period 1987-2021
Source: Author, depending on the data base of (WOS, 2021)

Since the marketing specialization is a large segment of academics and practitioners as it serves all life activities, therefore current study discusses the following set of research questions:

- RQ1: Are there significant differences in PV of DE among marketing-students according to gender oreducation level?
- RQ2: Are there significant differences in OS with DE among marketing-students according to gender oreducation level?
- RQ3: Is there a significant impact of PV on marketing students' OS with DE?
- RQ4: What are the main features affecting the OS of marketing students withDE?

2. Literature Review:

Distance education is defined as using computer technologies and in delivering education contents [1]. Hundreds of academic programs are now offered in most universities around the world (or perhaps all of them) by distance system[19][20], especially during and after the Covid-19 crisis[2]. DE meets the needs and wants of wide sectors of beneficiaries in all fields[21], and this educational pattern has become the future of implementing the concept of lifelong education[3]. The real challenge in this context is represented in answering two main questions: how satisfied the beneficiaries of distance education are? what are the positive aspects that were discovered by distance education during the Covid-19 crisis?[22]

2.1 Overall-satisfaction OS

Satisfaction is defined as an emotional state resulting from comparing the real performance with expectations[23]. Overall satisfaction refers to the same meaning, but it is more comprehensive[24], as it is not related to satisfaction with the performance of a particular institution, but rather is related to satisfaction in general with a specific pattern[25]. Several studies stress the importance of measuring customer satisfaction[26], especially in service products in which customers communicate directly with service producers[27]. Furthermore, some previous studies indicate significant differences in satisfaction with DE according to various factors (e.g., gender [1][28], education level [29][28], age [11], and many other factors). Satisfaction can be measured by the following three items[30][11][23]:

S₁: To what extent it meets the needs of the students.

S₂: The feeling of comfort with the decision of distance education.

S₃: Overall evaluation.

Current study suggests testing a set of factors that are expected to be key features impacting on OS includes[31]:

F₁: Ease of studying.

F₂: Teaching methods.

F₃: Technological skills development.

F₄: Fit the requirements of the labor market.

F₅: Meet the needs of students.

F₆: lower costs.

F₇: Communication alternatives.

2.2 Perceived Value PV

PV is appreciating of something compared to the sacrifices required to obtain it, and from economic perspective: to value a thing is to estimate it with respect to monetary worth. PV can be measured by three items[32][33][34]:

V₁: Valuable benefits.

V₂: Value worth sacrifices.

V₃: Good value of spent money.

2.3 Research hypotheses:

Figure 2 shows the hypotheses structure of this research, which cover the study objectives and answer the research questions, it includes six hypotheses as follows:

H₁: Marketing students' OS with DE are impacted by key features.

H₂: There are significant differences in OS with DE among marketing-students according to gender.

H₃: There are significant differences in OS with DE among marketing-students according to level of university education.

H₄: There are significant differences in PV of DE among marketing-students according to gender.

H₅: There are significant differences in PV of DE among marketing-students according to level of university education.

H₆: Marketing students' OS with DE are impacted by PV towards it.

3. Methodology:

This section aims to explain the scientific methodology of current study, it includes two sub-sections: instrument building and validity and data collecting and sampling.

3.1 Instrument building and its validity

This study is based on an e-questionnaire built on Google Form. The process of building the search instrument and testing its validity and reliability passed through 5 main stages of verification. First stage, a comprehensive survey was conducted on the WOS database of published manuscripts related to the topic of this study, to identify in general the developing movement of publishing in previous literature. While during second stage, benefit was taken to identify the research gaps that were not covered by previous studies, and the research hypotheses were formulated through this stage. Third stage, the initial formulation of the research instrument represented in the questionnaire was conducted. Fourth stage, the questionnaire was assessed by 17 experts and specialists in 9 fields related to the topic of research, and their recommendations were considered through improving the validity of the instrument. Fifth stage, the developed questionnaire reached 3 factors including 13 items (explained in sub-sections 2.1 and 2.2), all of them are built on 5 Likert scale. Furthermore, it was discussed with a random sample of 30 individuals from the targeted community to verify the clarity its formulation in accordance with research objectives.

3.2 Data collecting and sampling

3.3

Table 1:
Sample Description

Characteristics	Item	Frequency (2348)	Percentage
Gender	Female	1362	58%
	Male	986	42%

Education Level	Post-graduate	147	8%
	Under-graduate	1885	92%

Table 1 shows the description of the sample, that the research community is represented in two main categories: marketing students at both under-graduate and post-graduates, during the academic year 2020-2021. Data were collected electronically via an open link during March and April 2021 from 2348 participants.

4. Results:

This section of the current study aims to present the results of the statistical analysis of collected data from the research sample, through three sub-parts: confirmatory factor analysis, and hypotheses test results.

4.1 Confirmatory Factor Analysis CFA

In addition to the five stages that were followed in this study to verify the validity and reliability of the research instrument, multi statistical tests were conducted on the results that were reached, to verify two essential aspects: first, the extent to which the measuring items belong to the factors of the study. Second, ensuring the extent to which the results of the study can be generalized to the research community comparing with the recommended values of statistical tests and the acceptable degree of error. Table 2 shows the results of CFA of items and factors of the research compared to the recommended values[35], all comparisons confirm the affiliation of the items to the factors to be measured and evaluated.

Table 2:
Confirmatory Factor Analysis CFA

Factors/items	Mea n	SD*	Facto r Loadi ng	Confidence Interval on 95%	α^*	AVE *	CR *
Overall- satisfaction:					.88 2	.775 *	.91 2
S ₁	4.0	1.0	.887	3.949 ≤ x ≤ 4.091			
S ₂	3.9	1.1	.888	3.898 ≤ x ≤ 4.082			

S ₃	3.8	1.1	.872	3.718 ≤ x ≤ 3.902			
Perceived Value:	1	41			.88	.782	.91
V ₁	4.0	1.1	.891	3.985 ≤ x ≤ 4.075	4		5
V ₂	4.0	1.1	.889	3.964 ≤ x ≤ 4.057			
V ₃	3.9	1.1	.873	3.864 ≤ x ≤ 3.957			
Key Features:					.82	.708	.95
F ₁	4.0	1.0	.868	3.949 ≤ x ≤ 4.091	6		0
F ₇	4.0	0.9	.864	3.947 ≤ x ≤ 4.093			
F ₃	3.9	0.8	.853	3.840 ≤ x ≤ 3.980			
F ₄	3.9	0.9	.852	3.825 ≤ x ≤ 3.975			
F ₅	3.7	0.9	.851	3.713 ≤ x ≤ 3.867			
F ₂	3.7	1.0	.754	3.667 ≤ x ≤ 3.813			
F ₆	3.6	1.0	.741	3.583 ≤ x ≤ 3.757			

(*) SD: Standard Deviation, α : Cronbach's alpha (recommended value $\geq .7$), AVE: Average Variance Extracted (recommended value $\geq .5$), and CR: Composite Reliability (recommended value $\geq .7$).

4.2 Hypotheses test results

Based on the results of statistical analysis of collected data, the hypotheses H₁, H₂, H₄, and H₆ were supported, while the H₃, and H₅ were rejected, as shown by table 3.

Table 3:
Hypotheses test results

Hypotheses	Path	Statistical tests	Sig. results	Test results
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H ₁	KF → OS	Multi regression Pearson (.727)	* *	Supported
H ₂	Gender → OS	Eta (.134) One-way ANOVA	* *	Supported
H ₃	EL → OS	Kruskal-Wallis One-way ANOVA Pearson Spearman Gamma	Null Null Null Null Null	Not supported
H ₄	Gender → PV	Eta (.142) One-way ANOVA	* *	Supported
H ₅	EL → OS	Kruskal-Wallis One-way ANOVA Pearson Spearman Gamma	Null Null Null Null Null	Not supported
H ₆	PV → OS	Pearson (.758) Spearman (.782) Gamma (.741)	* * *	Supported

(*): significant, $P < 0.001$.

5. Discussion:

This sub-section is allocated to discuss the research results with the findings of related previous studies. The results of current study indicates the significant differences in OS and PV of marketing students towards DE according to gender factor, with high estimated values of OS and PV according to the collected data for both males and females of participants, but men appear more interested to DE than females, that is consistent with the suggestions of [36], [37] and [38], but it disagrees with [1]. Second, the study also indicates that no differences were established for the factor of EL on OS and PV of marketing students about DE, with high estimated values of OS and PV according to the collected data for both under-graduates and post-graduates. that is not consistent with the suggestions of [29] and [28]. Third, the study tested a list of 7 features to explore their impact of OS and PV of marketing students with DE, and the results supported the impact of 5 items: (Ease of studying, Technological skills development, Fit the requirements of the labor market, Meet the needs of students, and lower costs) with Correlation factor ($R^2 = .727$) and (Adjusted $R^3 = .529$) that is consistent with the suggestions of [39], [29] and [30], but did not support the other two features: (Teaching methods and Communication

alternatives). Fourth, the study decides that OS is impacted significantly by PV of marketing students with DE, that agree with the findings of [40] and [41].

6. Conclusion:

Figure 2 shows that current study provides 4 major contributions are represented in achieving the research objectives, which are summarized as follows: first, the study recommends allocating programs taking gender in considering whenever targeting marketing programs by distance. Second, the study recommends allocating unified promotional programs targeting DE, for each undergraduate and postgraduate of marketing programs by distance. Third, the study proposes a list of 5 key features that impact OS of marketing students with DE and recommends taking these features into account when designing any marketing program by distance. Fourth, the study recommends paying attention in measuring and improving PV of marketing students towards DE because of its significant impact.

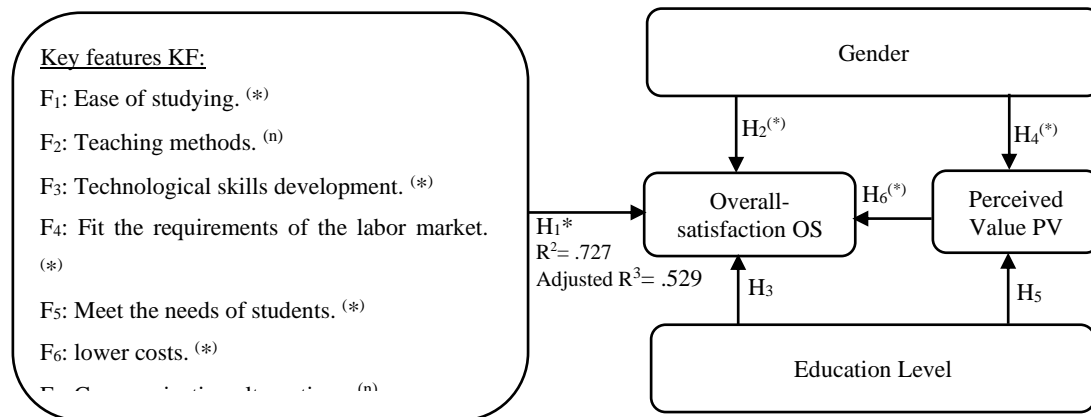


Figure 2: Hypotheses structure

(*): significant on significance level $P < 0.001$, (n): not significant on all significance levels .001 ,01, or .05.

7. Limitations and future research

This study focused on the perceived quality of marketing students at Imam Abdul Rahman bin Faisal University, and the extent to which they are satisfied with distance education. The study suggests addressing future research for other diverse disciplines in universities with different cultures and suggests more research on the pros and cons and lessons learned during the COVID-19 crisis.

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