



The Influence of Digital Marketing on Customer Loyalty in the Restaurant Industry in Uzbekistan

Mirakhimova Dilafruz Dilmurod Kizi, Chunli Du

School of Management, Wuhan Institute of Technology, Wuhan, China
Email: mirakhimovadil@gmail.com

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Abstract

The fast expansion of the Uzbekistan restaurant sector and digital evolution make digital marketing essential for establishing customer loyalty. The success rate of these digital marketing approaches mainly relies on customers' understanding of digital platforms. Researchers study digital marketing effects on Uzbek restaurant customer loyalty while exploring the partnership between customer perception and digital literacy as a final influence on customer relationship outcomes. Research findings fill an important knowledge gap which enables restaurant managers to develop superior digital engagement approaches in developing markets. A combination of quantitative surveys with 300 restaurant customers and qualitative interview data forms the research method. The research adopts the Technology Acceptance Model (TAM) together with Stimulus-Organism-Response (S-O-R) framework and Social Exchange Theory to explain how digital marketing methods with their components of social media engagement and customized promotions and online reputation administration directly and indirectly enhance customer loyalty. Hayes' SPSS PROCESS Model 7 serves as the testing tool for moderated mediation relationships to provide detailed information about fundamental processes. The analysis confirms that digital marketing amplifies customer loyalty power through dual channels which stem from enhanced perceptions of customers. Digital literacy functions as a vital moderator that leads low-digital-literate customers to embrace digital marketing but high-digital-literate customers to present resistance. The research implies that tried-and-tested digital marketing methods prove insufficient for consumers who possess modern technology knowledge. The research enables restaurateurs to develop specific strategies which involve matching content difficulty with viewer digital skills and using interactive valuable campaigns for customers with higher tech competence. The study brings significance to marketing theory by adopting digital

literacy frameworks and validating their applications through queries from an under-researched market. The research presents implementable guidelines which help experts optimize their digital marketing approaches in Uzbekistan's developing restaurant business. Restaurants which develop digital engagement methodologies based on customer skills and taste preferences will create stronger digital customer loyalty systems during the modern era.

Subject Areas

Marketing

Keywords

Digital Marketing, Customer Loyalty, Digital Literacy, Restaurant Industry, Uzbekistan, Moderated Mediation

1. Introduction

The food service sector in Uzbekistan has undergone certain changes on a large scale in recent times, primarily because of economic progress, the huge acceptance of digital technology, and the increasing population of urban areas [1] [2]. With the development of the economy in Uzbekistan, the hospitality industry has not only risen significantly but also become a major contributor to the growth of the country's economy and job creation. The entry of the internet and mobile technologies in the country has brought big changes in the way that restaurants can contact their customers through the digital means. However, the implementation of these new technologies has also brought the challenge of designing effective digital strategies and at the same time, solving the problem of the digital literacy gap of the customers [3].

The marketing of the Internet is the language of the current state and modernity, therefore, the understanding of digital marketing has become a clientele stimulating factor that could secure success in the industry of food in Uzbekistan which has become very competitive [4]. The introduction of social media platforms along with food delivery services has made it mandatory to apply digital marketing strategies, which through customers' engagement and loyalty could be a significant issue [5].

Nevertheless, this strategy's effectiveness is not felt similarly among the various regions in Uzbekistan, where there are differences in digital technology access and proficiency [6]. The use of digital technology and the change of human behaviour can be seen in the food industry in Uzbekistan, which, in many cases, is parallel to global trends in digital marketing, but still has its specific features [7]. Yandex.Eda is a food delivery platform that operates internationally as well as cooperating with the local companies, it is considered as among the best ways of winning customers' attention [8]. Thus, despite the big portion of their budget being spent on digital marketing, the markets in Uzbekistan are characterized by the

popularity of face-to-face marketing, which most of all, is important for some groups, like those living in rural areas).

While the restaurant business in Uzbekistan has made extensive use of digital marketing, there are still areas where there is a lack of research both in academia and for the business people. For instance, studies have shown that digital marketing had a negative impact on the loyalty of the customers, in academic literature, while the industry had already applied the approaches in their business. Also, research on this topic has been concentrated only on the more developed Western and Asian markets with almost no focus on the specific and individual needs of the Central Asian markets, basically Uzbekistan.

The current research involves presenting a systematic review of the connection between digital marketing strategies and customer loyalty in the restaurant sector of Uzbekistan. It is going to estimate how the perception of customers and the level of their digital literacy should influence the market. The primary goals of the study are as follows: First, it will try to reveal the impact of various digital marketing methods, namely, social media engagement, electronic promotions, and digital loyalty, on customer loyalty in the restaurant sector. In the paper, these strategies are checked for effectiveness in not only keeping the customers but also bringing new ones. The success of these strategies in customer retention and elicitation of referral systems is thus investigated. Second, the study will also look into the intermediary role that customer perception plays between digital marketing activities and customer loyalty. This will enable them to know what kinds of digital engagements melded the consumers' perceptions towards the service industry and how it influenced customer decision-making. Customers' perceptions mainly of the value, trust, and emotional connection the digital marketing channels give them are what bring out their loyalty. Third, the study will also examine how the different levels of digital literacy among customers can affect the success of digital marketing strategies. The primary aim of this research is to explore how digital marketing strategies influence customer loyalty specifically within Uzbekistan's restaurant industry. This focus is critical as the sector is rapidly evolving due to the digital transformation taking place in the region and so, we intend to identify service delivery modes that can boost customer loyalty among

2. Literature Review

2.1. Digital Marketing in Uzbekistan's Restaurant Industry

Digitalization in Uzbekistan's restaurant industry has tripled the catering turnover from \$445 million to \$826 million between 2018 and 2022 [8]. Restaurants use global and local online platforms to connect with customers and promote their services online [9]. Yandex.Eda is the main food delivery service along with Click.uz which is operated by a local bank [10]. Both services allow restaurants to create their menus, run promotions, and analyze the data.

Restaurants heavily rely on social media tools when designing their marketing plans because Uzbek digital consumers behave uniquely on these platforms (AY-

DIN, 2024). The combination of broadcast channels and private messaging in Telegram makes it the top choice for restaurant customer contact allowing communication through promotions and bookings and reviews. Telegram has been used by restaurants to create sticker-based loyalty programs and geolocation ads attracting more customers into the premises [11]. Instagram is often used for visually showcasing food items through posts, Stories and has shopping features that enable selling directly to fans.

Uzbek restaurants must combine international sites like Google Maps with local favourites such as Oshxona.net to manage their reputation online. While Google Maps shows basic listings worldwide, Oshxona.net is the main review site used by Uzbek speakers. Expert reviews on pilaf and samsa are better through Oshxona.net than other platforms. Uzbek payment methods now have loyalty features integrated with digital stamps. Payme combines QR-code payments with digital stamp cards while Click Pay lets customers redeem loyalty points instantly. Digital solutions mirror the traditional reward systems.

Marketing in Uzbekistan varies by region, such as Tashkent's Menu.uz digital menu for upscale restaurants and WhatsApp for Business in Samarkand that uses less data. Diverse conditions pose challenges, but food chains can expand nationally by adapting strategies. Some fancy eateries are trying out new tech like AR menus on Instagram and booking via Telegram. Mixing tech with traditional ways helpful to the people is the key to success in digital transformation in Uzbekistan's restaurant industry [12].

2.2. Digital Customer Engagement and Building Loyalty

The old stamp cards and membership booklets at eateries have been replaced with a digitized system. This is because the new method allows a provider of customer relations to continuously update database information beyond dining hours [13]. Digital approaches used in restaurants create stronger links with clients [13]. Businesses send out tailored offers based on past orders using Yandex Eda and Click.uz delivery apps. Loyalty systems have tiers and ways to monitor achievement digitally that were aligned with what customers want like progressing through levels. Digital payment methods allow reward points to be earned and redeemed during transactions [14].

People posting pictures of their meals is a big trend in Uzbekistan [15]. Restaurants on Instagram ask customers to enter photo contests using special hashtags [16]. This showing off food helps to attract new guests. It is more effective than traditional ads. Some restaurants create dishes that look great on social media to draw in more customers [17]. Video games and points systems engage customers in Uzbek places like cafes and eateries [18]. People can collect digital badges by sampling dishes and attending events. This is culturally fun as it fits into Uzbek social lives. Friends go to their favourite spots together to hang out.

The best digital loyalty programs in Uzbekistan blend modern ideas with local customs [19]. They use popular accounting systems but still show Uzbek warmth

[20]. Holiday greetings along exciting invitations for virtual food tastings help to feel connected that they are being welcomed into the homes of hosts. It demonstrates how global digital trends are made relevant for Uzbek personal preferences. Uzbek restaurants can succeed in business and go digital. They can have great platforms for customers because many have smartphones' and there are more mobile payments. However, restaurants must compete online for customer interest, while still being friendly to customers face-to-face which is part of Uzbek culture. The best businesses will combine data-driven ads with warm hospitality.

2.3. How Digital Skills Help Restaurants Market

To succeed in marketing in Uzbekistan's digital world, restaurant staff need digital skills meaning they should be able to operate tech tools, understand online content, and know how to behave on each platform [21]. These skills are very important because they affect how customers search for, evaluate, and interact with restaurants via digital platforms. Different generations and regions have different levels of digital literacy in Uzbekistan [22]. Younger city dwellers are tech-savvy and can use restaurant apps and social media as well as scan QR codes [23]. Older people and those from rural areas use traditional communication ways [24]. Hence, restaurants need to have two marketing systems one digital and another simple.

Uzbekistan has many digital languages. This makes it hard for restaurants to reach customers. They must use Uzbek, Russian, and English the languages. Each language needs special pictures and text to understand. This helps customers feel included in online ads. Restaurants can help people learn to use digital services. They can have ads that show the importance of these services. This way, they include more people in Uzbekistan's digital world. Ads are now a big part of the restaurant's job. A restaurant's poster campaign integrates society and gives knowledge to many users.

2.4. New Technologies and Future Changes

Uzbekistan's restaurants are changing fast that influences how they make advertisements or reach customers nowadays [25]. New online tools are making it easier to market to gain new clients and keep current ones happy [26]. This is happening because of recent innovations borrowed from other countries but modified by local conditions existing in Uzbekistan. In Uzbekistan now, restaurants use AI like chatbots on Telegram and WhatsApp to book tables or suggest dishes [27]. Some use computer vision to track how customers move for better seating and staff plans. Machine learning helps figure out the best times to offer each customer group deals.

In Tashkent, fancy restaurants use AR for marketing. Scanning QR codes to let customers see animated 3D food images before ordering [28]. Block chain offers local solutions for regional needs [29]. Some restaurants serving tourists use block chain to prove the honest ingredients and methods of traditional dishes. Some

places are planning loyalty tokens that customers can use in many partner restaurants. This tech builds trust in markets where food honesty and transparency are issues [30].

The Internet of Things (IoT) is connecting various features in restaurants [31]. Some outlets provide smart tables for guests to summon waiters and regulate lights and music via simple interfaces. Digital menus linked to inventory control avert product deficits and assist eateries in managing costs [32]. For Uzbek restaurants, which contend with seasonal sourcing, these technologies are quite helpful. Three innovations have potential growth prospects in Uzbekistan. Voice-controlled devices could revolutionize restaurant communication due to the spoken nature of Uzbek culture. AI algorithms can accurately forecast customer preferences. The Metaverse could enable virtual dining experiences that enhance physical venues. However, these technologies must align with cultural traditions and monitored infrastructure advancements.

2.5. Comprehending Theory and Conceptual Framework

Digital marketing and customer loyalty concepts in Uzbekistan's eateries are based on three established theories: the Technology Acceptance Model (TAM), Stimulus-Organism-Response (S-O-R) theory, and Social Exchange Theory [33]. This theoretical structure comprehensively assesses digital marketing effectiveness across Uzbekistan. People use restaurants' digital marketing tools in two main ways. They check out how helpful they are. Plus, they see if it's easy to use these tools. Different people in Uzbekistan view restaurant digital marketing differently [34]. Due to this, their reactions vary. These differences in attitudes help explain why some technologies are successful with some groups but not others [35].

When restaurants do digital marketing, it creates urges for customer loyalty [36]. Marketing push customers to see the value for money, trust the brand, and be satisfied. In this regard, it's the first step [37]. Then, they respond by repeatedly visiting the establishment, spending more, and telling others about it. As an important point, Uzbekistan's unique digital market setup influences decisions made by customers when evaluating opportunities provided. This obligatorily explains how the framework of thinking works. Social Exchange Theory is the key concept for comprehending how restaurants interact with customer's online [38]. Customers weigh the costs such as time and data sharing against the benefits like convenience and rewards. High quality digital benefits foster strong customer loyalty. The Uzbek patrons have cultural expectations of hospitable and personal services. This theory explains the varying effectiveness of digital strategies in specific markets.

The conceptual model has digital literacy as a moderating factor affecting all three theoretical relationships.

It influences:

- 1) Users' perceptions of usefulness and ease based on TAM.

- 2) Content processing according to the S-O-R theory.
- 3) Value assessment via Social Exchange to weigh benefits versus costs.

The multifaceted framework provides a practical approach for studying restaurant digitalization in Uzbekistan's specific context of technology and culture as well as market dynamics. This framework guides the present study and gives practical strategies for restaurants to boost their digital marketing effectiveness across various customer segments.

2.6. Key Concepts Studied

Customer Perception as a Mediating Variable: This concept examines how customers' views and interpretations of digital marketing efforts affect their loyalty to restaurants. Understanding customer perception is essential for designing effective marketing strategies that resonate with the target audience. This research shows that customers may have different perceptions and understandings when faced with particular digital marketing strategies that need to be taken into consideration when creating product promotions. Restating things while accepting customers' responses positively will enable marketers to develop a sense of belonging among customers increasing their loyalty and inspiring them to continue buying the same products or visiting the same restaurants. When looking at customers' perceptions of restaurants' digital marketing campaigns in Uzbekistan, readers should consider their personal perceptions of the totality of the campaigns and everything that is linked to the restaurants concerned. This will assist them in developing better digital marketing campaigns and in knowing what things matter most when establishing and retaining customers' loyalty in restaurants.

Digital Literacy as a Moderating Variable: Digital literacy assesses the proficiency with which customers navigate digital platforms. This variable is crucial, as it influences how effectively customers engage with digital marketing initiatives and can significantly impact their loyalty. Digital literacy, therefore, does not simply depend on the technology they use, but also on the way they use it. In assessing this concept in Uzbekistan's restaurant industry, the way customers perceive and respond to digital marketing activities guides their digital literacy levels. Customers can be able to visit the restaurant's website; make a call to the restaurant's customer service; query a social media team, and download an application for a restaurant's loyalty program. The high levels of success of this kind of communication and use of these technologies significantly contribute to the building of customers' loyalty towards restaurants in Uzbekistan.

3. Research Methodology

3.1. Research Design

The research joins theoretical aspects with local digital and cultural features. The quantitative part is central, it was carried out through surveys [39]. The respondents were 330 restaurant-goers from Tashkent, Samarkand and Bukhara. The aim was to find connections between digital marketing, people's opinions and loyalty

behaviours. Questions also covered engagements on Telegram and Click.uz, as well as popular food bloggers.

For this study, qualitative research adds to the quantitative results [40]. This was done by getting deep interviews with diverse client profiles and restaurant operators using digital marketing. Semi-structured used to identify reasons for earlier outcomes. This was based on cultural values and age. Questions focused on customers' platform usage and any barriers faced. Method integration occurs twice: during instrument development and analysis phases. Preliminary qualitative findings shape survey instrument development. This obtains broad patterns with detailed contextual insights that suit Uzbekistan's business environment. The research employs a mixed-methods approach to gain comprehensive insights. On the one hand, qualitative methods have been used to assess issues related to the complexity of human & rsquo. While the number of qualitative interviews conducted during the research was not comprehensively mentioned in the study, the interviews served to probe into the attitudes and behaviors of customers towards digital marketing.

3.2. Participants and Sampling

A stratified purposive sampling method has been employed to ensure adequate representation of distinct demographic and behavioural groups in Uzbekistan's restaurant sector. The sample consists of two segments: restaurant consumers and restaurant professionals. Quantitative survey included 330 restaurant consumers located in Tashkent, Samarkand, Bukhara, and Fergana. A total of 319 responses received back with 300 valid responses after cleaning. The geographical method by a number of regions enables researchers to study local digital practices. The sample encompasses four age brackets as well as gender split between frequent diners and occasional visitors. Participants were recruited through restaurants' partnerships, social media in Uzbekistan, and customers' interactions with the waiters. In the recruitment materials, the languages used were Uzbek and Russian preferred by the local community. Two main app usages patterns were used to categorize the participants. Most use click.uz while the rest do it through social media.

The various approaches adopted include:

- The design has enough people from all groups.
- There is a way to check for digital marketing in different areas.
- Compare how people of different ages use it.
- The recruitment keeps the study and its results valid.

The study looks at how digital marketing affects all the customers in Uzbekistan and gives useful information to restaurants. It is based on local conditions, so it is valid for the Uzbek market.

3.3. Data Analysis Techniques

The research first checks survey responses for errors due to incomplete or incon-

sistent responses [41]. This was done by the use of attention-check questions which help to locate those respondents who may not have been engaged. Thus, they then perform an analysis which includes both descriptive statistics and tests of reliability and validity. The PROCESS macro was used to examine the moderated mediation models [42]. The analyses identify how digital marketing impacts customer loyalty with the mediating effects of customer perception and the moderation effect of digital literacy. Furthermore, control variables such as age, how often they dine out, and restaurant type are considered.

The thematic analysis of qualitative data was done according to the framework by [43] taking into consideration the cultural context of Uzbekistan. Coding was done repeatedly in the original Uzbek or Russian language in order to maintain language sensitivity in the data. Initially, open coding was used to identify recurring concepts and later to develop broader themes using axial coding. The purpose of it was to explore how age affects digital experience while restaurant culture shapes customer's expectations from technology-based services. Specific local conditions need to be taken into account. In this study we used Uzbekistan-based coding schemes. We looked at cultural terms like "mehmondo'stlik" (hospitality) while assessing digital interactions. We tested some models numerically to check if the measurements were valid for both Uzbek and Russian languages. We also checked different age groups.

3.4. Ethical Considerations

The research follows privacy protective mechanisms through proper data control practices. The anonymization was done immediately whereby identifiable information is given a code instead. The minimal data principle was applied so we only collect essential research-related materials without compromising selected records such as expenses or food consumption lists. It was agreed upon how long anonymised data has to be kept/ destroyed after five years using expertise from cyber security experts in our country.

3.5. Conceptual Framework

The hypotheses of this study are as follows:

H1: Digital Marketing Strategies have a direct positive effect on Customer Loyalty.

H2: Customer Perception mediates the relationship between Digital Marketing Strategies and Customer Loyalty.

H3: Digital Literacy negatively moderates the relationship between Digital Marketing strategies and customer perception.

This research builds its conceptual framework using the Technology Acceptance Model (TAM), Stimulus-Organism-Response (S-O-R) theory, and Social Exchange Theory (SET). These theories illustrate how digital marketing strategies affect customer loyalty through customer perception as mediation and digital literacy as moderation in Uzbekistan's restaurant industry. The framework consid-

ers Uzbekistan's unique cultural background and the developing digital infrastructure. The independent variable, Digital Marketing Strategies (DMS), covers social media engagement on Instagram and Telegram, personalized promotions via local apps such as Click.uz, and online reputation management on Oshxona.net. These strategies affect customers' feelings and actions. Customer Perception (CP) has three dimensions: perceived value, trust, and satisfaction that all influence Customer Loyalty (CL) shown by repeat visits, brand preference, or recommendations.

The plan aims at making clients experience digital marketing strategies measuring capability of judging its contents. Digital competence encloses understanding of platforms and evaluation of messages featuring therein. Persons with enhanced digital skills critically evaluate promotional contents tagged generic and manipulative. Limited skills lead them to rely on mere basic channels devoid alternatives and analytic capacity. Different theories justify the relationships defined in this approach. The application of digital marketing strategies enhances customer loyalty since they elicit favourable reactions according to S-O-R model which suggests that perception processes modify external signals into loyalty responses. The recognition of benefits surpassing costs results in impression formation thus fostering positive feelings towards marketers on Facebook via social exchange theory.

Digital literacy is key to understanding how marketing works across various groups. If people know more about digital technology, they can be less trusting of generalized ads. This leads to different reactions to online marketing. The framework in **Figure 1** starts from concepts used worldwide and then relates them to Uzbekistan's restaurants. It aids researchers and marketers in creating better online strategies for diverse customers. Moreover, **Figure 1** displays how marketing boosts loyalty by taking into account customers' perceptions and distinctions in digital skills.

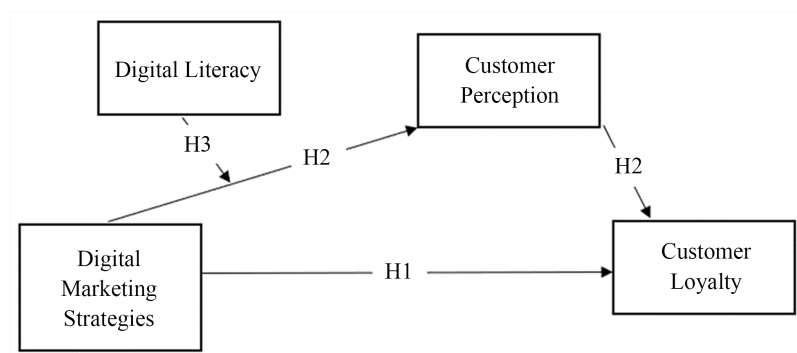


Figure 1. Conceptual framework.

4. Results and Analysis

4.1. Demographic Data

The results of the study indicate that digital marketing has a favorable impact on

customers' loyalty, which is an essential aspect of any business looking to retain its clients and attract new ones. This relationship between digital marketing and loyalty has revealed a very crucial aspect regarding customers' perceptions arising from digital marketing efforts, thereby establishing customers' perceptions of digital marketing techniques as central to the loyalty creation process.

The demographic features of the respondents who participated in the survey (N = 300) are explained here to check the validity of the sample while ensuring that there is no bias in the dataset. **Table 1** below show demographic aspects used for the study such as age and gender, urban versus rural locality, along with frequency of dining out because these aspects are important for analysing how digital marketing is adopted in Uzbekistan's restaurant industry but excluded income or education variables which may lead to confounding variables.

Table 1. Demographic data.

Variable	Category	Frequency (n)	Percentage (%)
Age	18 - 25 years	90	30.0
	26 - 35 years	105	35.0
	36 - 45 years	75	25.0
	46+ years	30	10.0
Gender	Male	135	45.0
	Female	150	50.0
	Other/Prefer not to say	15	5.0
Location	Urban (Tashkent/Samarkand)	180	60.0
	Rural (Other regions)	120	40.0
Dining Frequency	Weekly	120	40.0
	Monthly	150	50.0
	Rarely	30	10.0

The survey looked at age and gender of the people they asked around Uzbekistan. Most of the people asked were aged 26 - 35 (35%) as they go out to eat and see ads most often. There were also older people (10%) in the study and most of the people asked were adults aged 18 - 45 (90% total). The people asked were almost equal in number between the two genders - males were 45% and females were 50%. The small number of 5% allowed for sensitive recording of gender which shows good practice in marketing research. The sample was made up of both urban and rural respondents with a ratio of 60:40. Cities like Tashkent and Samarkand had more participants while rural areas provided useful information about non-connected places. We made sure there was a mix of digital skills among the respondents to get a clear view on this.

The focused on people who go to restaurants often as they formed 90% of the sample. This way, their responses were based on real experiences of digital marketing communications. The diverse groups of people in our study helped us as-

sess how relevant restaurant digital marketing plans are. Age and living location categories meant that results cannot be swayed by having too many from one group which could skew outcomes thus ensuring accuracy in our conclusions about their understanding of local digital media used at these establishments.1. Repeat as necessary for each additional affiliation.

4.2. Descriptive Statistics

The results on **Table 2** (descriptive statistics) show how digital literacy, digital marketing, customer perception, and customer loyalty diverge. Analysis of some responses gave crucial patterns about ratings across constructs.

Table 2. Descriptive statistics.

	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DL1	1.00	5.00	3.5967	0.90372	-0.483	0.141	0.018	0.281
DL2	1.00	5.00	3.5467	0.87772	-0.323	0.141	-0.076	0.281
DL3	2.00	5.00	3.6033	0.87285	-0.168	0.141	-0.633	0.281
DL4	1.00	5.00	3.6100	0.92054	-0.288	0.141	-0.499	0.281
DL5	1.00	5.00	3.5900	0.94421	-0.370	0.141	-0.368	0.281
DM1	2.00	5.00	3.8000	0.81376	-0.292	0.141	-0.380	0.281
DM2	2.00	5.00	3.7633	0.81826	-0.239	0.141	-0.443	0.281
DM3	2.00	5.00	3.7600	0.83550	-0.321	0.141	-0.401	0.281
DM4	2.00	5.00	3.7933	0.87551	-0.307	0.141	-0.591	0.281
DM5	2.00	5.00	3.7800	0.86840	-0.298	0.141	-0.566	0.281
CP1	2.00	5.00	3.9267	0.78102	-0.592	0.141	0.249	0.281
CP2	1.00	5.00	3.8667	0.77733	-0.538	0.141	0.396	0.281
CP3	1.00	5.00	3.9400	0.79066	-0.670	0.141	0.570	0.281
CP4	2.00	5.00	3.9033	0.78061	-0.509	0.141	0.085	0.281
CP5	2.00	5.00	3.8200	0.82251	-0.309	0.141	-0.409	0.281
CL1	2.00	5.00	3.9800	0.70800	-0.712	0.141	1.039	0.281
CL2	1.00	5.00	4.0067	0.77586	-0.920	0.141	1.521	0.281
CL3	1.00	5.00	4.0133	0.78008	-0.960	0.141	1.587	0.281
CL4	1.00	5.00	4.0267	0.71717	-0.751	0.141	1.383	0.281
CL5	1.00	5.00	4.0400	0.76617	-0.742	0.141	0.873	0.281
Valid N (listwise)	300							

The descriptive statistics report distribution properties about all study variables which include Digital Literacy items DL1-DL5 alongside Digital Marketing items DM1-DM5 and Customer Perception items CP1-CP5 and Customer Loyalty items CL1-CL5. The analysis of 300 complete responses (Valid N = 300) reveals important patterns about respondents' ratings across all constructs.

Central Tendency and Variability:

Respondents rated all constructs above 3.0 with standard deviation ranging from 0.70 to 0.94 for digital literacy while customer loyalty items had lesser dispersion at 0.70-0.78. Therefore agreement was greater on loyalty levels as opposed to digital literacy assessment results.

Distribution Characteristics:

All ratings had a negative skew, indicating that most of the respondents chose higher ratings on the scale. Customer loyalty exhibited greater positive skewness, which shows that people had favourable behaviour patterns towards loyalty. The CL items were leptokurtic indicating concentrations of scores while others were platykurtic thus less concentration.

Digital Literacy (DL) Items:

The mean ranges between 3.55 - 3.61 while standard deviations were 0.87 - 0.94 for five DL items. DL's bell curve was flat indicating less discrimination value. Thus differences in digital skills of people caused higher variation for DL items against others.

Digital Marketing (DM) Items:

DM items' means ranged from 3.76 - 3.80 and SDs were 0.81 - 0.88. This shows respondents similar perceptions about digital marketing strategies. Their evaluations exhibited negative skewness between -0.24 to -0.32 and flatness with negative kurtosis between -0.38 to -0.59 .

Customer Perception (CP) Items:

The mean ratings of CP items ranged from 3.82 - 3.94, SD varied between .78 and 0.82. Special attention was given to CP's skewed distribution (-0.67) which had high positive kurtosis (0.57). Customers perceived the service positively with much appreciation for CP3 measure.

Customer Loyalty (CL) Items:

CL items showed the highest means (3.98 - 4.04), lowest SDs (0.71 - 0.78). There were also severe negative skews (-0.71 to -0.96) and positive kurtosis values (0.87 - 1.59). Consensus among respondents with few very positive evaluations led to peaked distribution patterns of highly positive loyalty ratings across CL2 & CL3 items.

Implications for Analysis:

Respondents tend to agree too much on loyalty items. Some items have skewness and kurtosis. Transform these when doing analyses that need a normal distribution. Analyse the variance patterns across many items to test the reliability of scales. Some items show similar response trends. There is enough variation to use correlation analysis as well. Past analyses were done from descriptive patterns. They revealed non-normal distributions present.

4.3. Hayes Process Macro

Hayes' PROCESS Macro was used to evaluate the role of digital marketing strategies in creating customer loyalty via perceptions and digital literacy. This macro

performs simultaneous evaluation of mediation and moderation effects in one model using regression analysis. It also addresses potential non-normal data issues. It thus effectively examines how digital marketing affects loyalty conditions. The researcher employed PROCESS Model 7 to confirm key assumptions of conceptual framework on effect of digital marketing on loyalty. The study focused on effect of digital marketing strategies on loyalty, with a mediation of customer perceptions and moderation by digital literacy. It utilized appropriate statistical power using resample-based 5000 bootstrap confidence intervals for reliable effect estimates.

The analytical method resolved important methodological issues in the analysis. To retain statistical sensitivity, digital literacy is considered as a continuous variable while preventing unintentional data changes that may distort results. The analysis clarified how mediated paths through customer perception differ at various digital literacy levels. It had the flexibility to discover both theoretical progress and useful marketing strategies for differing customer segments. The analytical plan aligned with theoretical framework integrating Technology Acceptance Model, Stimulus-Organism-Response theory and Social Exchange Theory. Through PROCESS application, the theoretical perspectives simultaneously evaluated how digital literacy influences technology acceptance, the way digital stimulus processes into perceptions and behaviours, and the amounts of costs and benefits considered by customers in digital marketing interactions. **Table 3** below show detailed outcomes starting from total effects analysis, direct effects analysis, indirect effects analysis, and conditional relationships at different digital literacy levels.

Table 3. Direct, indirect and total effects.

Effect Type	Path	Coefficient (β)	SE	p-value	95% Bootstrap CI	Condition (DL Level)
Total Effect	DM \rightarrow CL	0.423	0.042	<0.001	[0.340, 0.506]	-
Direct Effect	DM \rightarrow CL (controlling for CP)	0.338	0.044	<0.001	[0.251, 0.426]	-
Indirect Effects	DM \rightarrow CP \rightarrow CL	-	-	-	-	-
	• Low DL (-0.844 SD)	0.122	0.027	<0.001	[0.066, 0.175]	16th percentile
	• Mean DL (0 SD)	0.086	0.021	<0.001	[0.045, 0.128]	50th percentile
	• High DL (+0.844 SD)	0.050	0.023	0.017	[0.004, 0.096]	84th percentile
Index of Moderated Mediation	DM \times DL \rightarrow CP \rightarrow CL	-0.042	0.016	0.008	[-0.075, -0.014]	-

The PROCESS Macro analysis (Model 7) reveals the link between digital marketing and customer loyalty is moderated by digital literacy. Higher digital literacy diminishes the positive impact of digital marketing strategies on customer perception. The analysis shows that digital marketing and digital literacy jointly influence customer perception. High digital literacy curtails the positive relationship between marketing and perception. The model his predicts 26.98% of customer

perception changes. The results demonstrate that at low digital literacy levels, digital marketing has a strong influence on perceived customer perception. The relationship weakens as digital literacy increases but remains significant even at high levels. Thus, digital literacy limits the relationship between marketing and perception.

Results point to DM and CP variables leading CL in a significant way. These explain 37.19% of what Customer Loyalty is about. DM affects CL by itself and CP plays a partial mediation role. Indirect effect via DM > CP > CL changes based on DL levels. For those low in DL it peaks at 0.1216 above/below the mean. At normal DL it's 0.0859 lowest at high-DL with 0.0502 Impact of DL on pathway from DM to CL is -0.0422 . In theory and practice this shows DL is key. Digital marketing impacts perception to grow loyalty dependent on the level of DL possessed by customers. Restaurants should tailor their approaches according to customers' digital literacy including low-DL ones requiring simple ways versus high-DL ones needing value content.

4.4. Hypotheses Results

H1: DMS have a positive impact on CL.

Digital marketing strategies have a strong positive relation to customer loyalty ($\beta = 0.338$, $p < 0.001$). When customers perceive digital marketing strategies positively, it leads to higher loyalty. Such strategies include frequent contacts through digital channels. This is consistent with the marketing basics where digital platforms are decisive for keeping customers in service industries. Even so, the role of customer perception is critical for long term loyalties established by branding, conveniences, and habit formations made visible through digital marketing efforts which enhancing together customer loyalty.

H2: CP mediates the DMS' CL relationship.

Customer perception partly mediated between Digital Marketing Strategies using different paths depending on digital literacy levels. Low digital skills boosted customer perception helping develop loyalty based on DMS ($\beta = 0.122$). However, this confirmed direct effects continued suggesting only partial mediation. Higher digital literates showed reduced mediation effects for CP meaning less significance in their cases. The findings supported Stimulus-Organism-Response theatrical framework explaining cognitive processes which existed resulting from digital stimuli leading behaviour stages are limited by customer's abilities.

H3: Digital Literacy (DL) lessens the impact of Digital Marketing Strategies (DMS) on Customer Perception (CP)

The study found a negative impact between DL and DMS on CP ($\beta = -0.130$, $p = 0.001$). Customers with high DL levels (≥ 0.9975 SD) did not perceive DMS positively as shown by Johnson-Neyman analysis. This agrees with the Technology Acceptance Model that states people with different skill levels evaluate technology differently. A high DL level means customers evaluate marketing deeper and find them less impactful or annoying. Therefore, segmenting customers by DL levels

matters because this clearly shows the psychological effects of digital marketing. The hypotheses results are shown below in **Table 4**.

Table 4. Summary of hypotheses.

Hypothesis	Description	Result	Key Evidence
H1	Digital Marketing Strategies (DMS) have a direct positive effect on Customer Loyalty (CL)	Accepted	Significant direct effect ($\beta = 0.338$, $p < 0.001$, 95% CI [0.251, 0.426])
H2	Customer Perception (CP) mediates the relationship between DMS and CL	Partially Accepted	Significant but partial mediation (Indirect effect $\beta = 0.086$, $p < 0.001$, CI [0.045, 0.128])
H3	Digital Literacy (DL) negatively moderates the relationship between DMS and CP	Accepted	Significant interaction ($\beta = -0.130$, $p = 0.001$). Effects weaken for high-DL customers (Johnson-Neyman point = 0.9975 SD)

4.5. Qualitative Analysis

Digital marketing affects how customers view restaurants in Uzbekistan. The study involved talking to 30 customers and 15 restaurant owners from different areas. It included some in-depth interviews which helped to reveal more facts than surveys. The researchers used thematic analysis to find patterns in customers' experiences and restaurant owners' strategies.

4.5.1. Digital Literacy as a Moderating Factor

People's understanding of digital information influenced their reaction toward digital marketing messages from restaurants. Those who are not so knowledgeable mostly trust basic messages like texts but criticize general promotional messages as fake. The results are supported by those of the quantitative study in which some people were found not to believe in what they see online.

4.5.2. The Mediating Role of Customer Perception

Customers like real stuff, not ads. Restaurant in Samarkand got famous for showing farmers markets and cooking videos online. Timing is key for service recovery on Telegram. One customer said, "They fixed my problem in an hour, so I trust them." Telegram worked better than Instagram for all ages.

4.5.3. Direct Effects on Customer Loyalty

Direct effects of marketing on loyalty exist too. Busy workers use Click.uz for fast connection. Young people liked Tashkent Burger app badges, while older ones chose straightforward discounts.

4.5.4. Implementation Challenges and Cultural Considerations

A restaurant manager from Bukhara has paper menus for senior locals and Instagram for tourists. It is crucial to match digital content with Uzbek hospitality traditions according to managers. Local Cyrillic characters engage significantly as compared to Russian. Cultural assimilation delivers the connection between marketing execution and results.

Quantitative results indicate that it works but only partially. By combining quantitative metrics with qualitative market dynamics, we acquire better outcomes in Uzbekistan.

5. Conclusions

A comprehensive evaluation of digital marketing approaches affecting restaurant customer loyalty in Uzbekistan exists based on integrated concepts including the Technology Acceptance Model with Stimulus-Organism-Response theory and Social Exchange Theory. The research framework included both quantitative surveys of 300 restaurant customers as well as qualitative interview methods which allowed for the investigation of behavioral patterns alongside psychological mechanisms. The study examined three main relationships between digital marketing and loyalty including direct relationships and how perception acts as a middle factor along with digital literacy as a moderating element between them.

The study demonstrates how digital marketing effectiveness displays intricate patterns because it operates differently among various client groups. Digital literacy existed as a vital divergence which completely changes how users interact with digital advertising communications. Digital customers who have limited technological expertise reacted best to basic digital procedures which carefully followed typical trust-establishing practices. Customers who demonstrated high levels of digital literacy displayed advanced evaluation behaviors by preferring interactive content which led them to avoid generalized promotional materials. The results demonstrate that basic digital marketing strategies should be adjusted for Uzbekistan to become more effective in the market.

The main contributing factor of this investigation is its analysis of cultural elements that determine digital marketing success. The study demonstrated that digital advertising which incorporated traditional elements performed best among all demographic profiles compared to standardized digital content. The study disproves universal Western marketing ideas by demonstrating that keeping cultural elements in technology ensures successful adoption. The research discovered significant points where further digital elements failed to increase customer perception quality.

Through its cultural adaptation of the digital literacy assessment tool the study adds new methodological practices that align with Central Asian research needs. Through its design the research successfully linked quantitative behavioural outcome assessment to qualitative cultural and psychological understandings. Through the integration of analytics from their platform alongside survey data and interview insights the research compiled a holistic view of digital marketing success which addressed both quantifiable actions and psychological motivations.

5.1. Relevance

This research focuses on addressing a significant gap in knowledge within the context of Under-researched region of Central Asia, particularly Uzbekistan. By

critically investigating the intersection of digital marketing and customer loyalty, the study not only provides valuable insights for scholarly inquiry into this misrepresentation, but also imparts an essential understanding for the regional business community. These two areas of focus will have a potential effect on the growing number of businesses being attracted towards Uzbekistan, which is a developing economy in Central Asia.

5.2. Innovation

The study attempts to ensure that while being based on established theoretical frameworks, it also pays attention to cultural peculiarities present in Uzbekistan. This intermingling approach enriches the knowledge base on this topic, thereby contributing to the literature on digital marketing and customer loyalty, while at the same time offering possibly useful strategies for the restaurant industry in the region. Through this detailed analysis, the authors intend to ensure that businesses in Uzbekistan have appropriate information to carefully formulate their marketing strategies while at the same time participating in an aspect that involves retaining clients through the means of digital tools.

5.3. Limited Generalizability

The findings of this study are highly influenced by the specific context of Uzbekistan and, therefore, may not be applicable to the digital marketing and customer loyalty phenomena in other parts of the world, or in other sectors, where the customer behavior relates to other industries or regions. Based on information obtained in the study, the authors could suggest that the generalizability of the findings might be improved if further research made use of a comparative study design in which data is collected from businesses in multiple countries or regions and an analysis made between the variables in question.

5.4. Sampling Concerns

The use of purposive sampling techniques and stratification might lead to biases which may affect how accurately the selected sample represents the whole group. While the researchers were aware of these issues, more rigorous reporting of the qualitative data collection, the sampling, and the analysis would serve a very crucial role in enhancing the credibility of the qualitative aspect of the research. In this manner, the results would not be perceived as representing the opinion of just a few individuals and/or the opinions of a small group, but as actual reflections of the sentiments of individuals from the restaurant market population in Uzbekistan.

Insufficient Cultural Examples: In the paper entitled *Cultural Adaptation in Digital Marketing: A Search for a Balance between Tradition and Modernity in Japanese Contemporary Culture*, cultural adaptation and traditional elements in digital marketing are discussed. But it mentions some concrete examples to support the arguments made. The incorporation of specific examples and cases would

have enhanced the practicality of the paper and increased the discussion to great heights. If accuracy and points of interest are added to these case studies, the practitioners would be able to get a better understanding of the case studies and how to apply the findings.

Oversimplified Moderator Analysis: Even though the importance of digital literacy as an echo is recognized in the research carried out, the paper highly and thoroughly elaborates on this component, which is also a clear moderation of the arguments of the paper. Factors that were not explored are age, gender, social class, or urban or rural populations as potential moderators to get a better understanding of how customers respond to digital marketing. These also are extra explanations of integrated and adapted analysis, as the examination of how these factors influence the way customers approach digital marketing can be important in bringing some respective and applicable suggestions to digital marketing strategies in the contemporary world.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Khudoyberdiev, A. (2020) Success Factors of IT Innovation Projects in Central Asia: A Study of IT Innovation Development in Uzbekistan. *Politecnico di Torino*.
- [2] Starr, F. and Sellman, M. (2023) Uzbekistan's Urban Future. *Himalayan & Central Asian Studies*, **27**, 55-70.
- [3] Weerasinghe, L. and Nirere, B. (2022) Challenges of Digital Transformation: A Case Study of the Restaurant Industry.
- [4] Davronbek o'g'li, K.D., Shonazarovich, Y.S. and Anvarovich, R.O. (2024) The Overview of Marketing Strategies for SMEs in Uzbekistan. *Scientific Journal of Actuarial Finance and Accounting*, **4**, 300-305.
- [5] Sharma, K. (2024) Digital Marketing Strategies Adopted by Nepalese Restaurant After COVID-19.
- [6] Zaheer, M.A., Anwar, T.M., Khan, Z., Raza, M.A. and Hafeez, H. (2024) How Do Strategic Attributes of Electronic Commerce Impel the Perceived Value and Electronic Loyalty of Online Food Delivery Applications (OFDAs). *Journal of Innovative Digital Transformation*, **1**, 48-67. <https://doi.org/10.1108/jidt-10-2023-0025>
- [7] Abdullaev, E. (2023) Shopping Mall Attractiveness Attributes in Uzbekistan and Consumer Segmentation. *Journal of Digital Convergence*, **9**, 15-30.
- [8] Chkalova, O., Bolshakova, I., Kopasovskaya, N., Nekrasova, T. and Salkutsan, S. (2022) Info-Communications-Based Interaction of Companies and Consumers on the Grocery Retail Market. In: Koucheryavy, Y., Balandin, S. and Andreev, S., Eds., *Internet of Things, Smart Spaces, and Next Generation Networks and Systems*, Springer International Publishing, 122-146. https://doi.org/10.1007/978-3-030-97777-1_11
- [9] Sh, N.S., Begoyim, A. and Dilsuz, K. (2023) How to Improve Restaurant Productivity and Reduce Turnover with Qualified Workers in Uzbekistan. *Czech Journal of Multi-disciplinary Innovations*, **17**, 6-15.

- [10] Mutanov, G., Issayeva, Z. and Serikbekuly, A. (2022) The Change in the Main Characteristics of the Company's Business Model on the Example of a Company Adal Catering. In: Mutanov, G. and Serikbekuly, A., Eds., *Digital Transformation in Sustainable Value Chains and Innovative Infrastructures*, Springer International Publishing, 137-150. https://doi.org/10.1007/978-3-031-07067-9_13
- [11] Aydın, S. (2024) Art Marketing Techniques and the Development of Art Marketing with Digital Transformation. *Turkish Online Journal of Design Art and Communication*, **14**, 463-478. <https://doi.org/10.7456/tojdac.1413518>
- [12] Dolchinkov, N.T. (2025) Interconnection of Digital, Cultural, and Strategic Transformations on the Balkan Peninsula. In: Dinçsoy, M.O. and Can, H., Eds., *Achieving Business Excellence through Triple Transformation*, IGI Global, 209-240. <https://doi.org/10.4018/979-8-3693-9435-9.ch008>
- [13] Abdulaxatov, M. (2024) Development Trends of Digital Marketing. Vol. 2, Nordic Press, No. 0002.
- [14] Yulianti, A.E. and Ghina, A. (2025) Optimizing User Experience in Digital Payments: The Case of Finpay Money. *International Journal of Innovation in Engineering*, **4**, 1-27. <https://doi.org/10.59615/ijie.4.4.1>
- [15] Kudaibergenova, D.T. (2020) The Body Global and the Body Traditional: A Digital Ethnography of Instagram and Nationalism in Kazakhstan and Russia. In: Beyer, J. and Finke, P., Eds., *Practices of Traditionalization in Central Asia*, Routledge, 54-71. <https://doi.org/10.4324/9781003018964-4>
- [16] Ismadiyarov, U. (2024) Influence of Social Media on a Businesses Outreach.
- [17] Gorf, L. (2024) Look How I Dine!: The Analysis of Status Signalling through Sustainable Dining in Social Media Posts.
- [18] Ghaforiyan, M., Sorourkhah, A. and Edalatpanah, S.A. (2024) Identifying and Prioritizing Antifragile Tourism Strategies in a Neutrosophic Environment. *Journal of Fuzzy Extension and Applications*, **5**, 374-394.
- [19] Schmitz, A. (2020) Uzbekistan's Transformation: Strategies and Perspectives.
- [20] Shavkatovna, N.K. (2024) The Corporate Culture in Uzbekistan and How It Influences the Work Process.
- [21] Nozimova, M. (2024) The Digital Economy in Uzbekistan: Opportunities and Challenges. *Journal of Management Value & Ethics*, **14**, 71 p.
- [22] Aydın, S. (2024) The Importance of Digital Marketing and Technology in Uzbekistan. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, **11**, 310-323.
- [23] Grover, M.R. (2021) Embracing Technology: Get Tech-Savvy by Learning about Your Computer, Smartphone, Internet, and Social Media Applications (English Edition). BPB Publications.
- [24] Carr, C.T. (2025) Computer-Mediated Communication: A Theoretical and Practical Introduction to Online Human Communication. Rowman & Littlefield.
- [25] Alt, R. (2021) Digital Transformation in the Restaurant Industry: Current Developments and Implications. *Journal of Smart Tourism*, **1**, 69-74. <https://doi.org/10.52255/smarttourism.2021.1.1.9>
- [26] Maguire, G. (2024) Online Business Ideas for Beginners: Easy Ways to Make Money from Home. Garreth Maguire.
- [27] O'G'Li, A.A.A. (2024) O'zbekiston Respublikasida Joylashgan Restoran Uchun Mahalliy Marketing Vositalari. *Raqamli Iqtisodiyot*, No. 7, 280-289.
- [28] Sakib, S. (2021) An Augmented Reality Concept for a Restaurant's Menu Based on

Existing User Experience Data.

- [29] Ataniyazov, J. and Shirinova, S. (2021) Blockchain as a New Stage in the Development of the Digital Economy of Uzbekistan. *Turkish Online Journal of Qualitative Inquiry*, **12**, 3832-3841.
- [30] Muminova, E., Honkeldiyeva, G., Kurpayanidi, K., Akhunova, S. and Hamdamova, S. (2020) Features of Introducing Blockchain Technology in Digital Economy Developing Conditions in Uzbekistan. *E3S Web of Conferences*, **159**, Article No. 04023. <https://doi.org/10.1051/e3sconf/202015904023>
- [31] Fayzullayeva, M. (2024) Key Benefits of Internet of Things (IoT) in the Restaurant Context. *Current Approaches and New Research in Modern Sciences*, **3**, 26-29.
- [32] Ramazanova, A. (2024) Strategic Planning for Small Businesses in Central Asia: A Case of Healthy Fast-Food Restaurant.
- [33] Avşar, M. (2024) An Evaluation on Sustainable Tourism Certificate and Accommodation Businesses. 157.
- [34] Furqat o'g'li, T.D. (2023) The Impact of Social Media Marketing (SMM) on Tourist Motivations and Travel Decision-Making Process: Study of Tashkent, Uzbekistan. journal: *Alfraganus*, **5**, 73-78.
- [35] Jeong, J.Y., Karimov, M., Sobirov, Y., Saidmamatov, O. and Marty, P. (2023) Evaluating Culturalization Strategies for Sustainable Tourism Development in Uzbekistan. *Sustainability*, **15**, Article No. 7727. <https://doi.org/10.3390/su15097727>
- [36] Pham, T. (2024) The Role of Social Media Marketing in Building Customer Loyalty in Fast Casual and Fast-Food Restaurants in Helsinki.
- [37] Singh, S., Singh, G. and Dhir, S. (2022) Impact of Digital Marketing on the Competitiveness of the Restaurant Industry. *Journal of Foodservice Business Research*, **27**, 109-137. <https://doi.org/10.1080/15378020.2022.2077088>
- [38] Rizal, H., Amin, H., Suddin, L., Sondoh, S.L. and Jung Ku, C. (2020) Relationship Quality and e-Loyalty towards Online Travel Agency (OTA): Social Exchange Theory Perspective. *Jurnal Pengurusan*, **58**, 39-51. <https://doi.org/10.17576/pengurusan-2020-58-04>
- [39] Nardi, P.M. (2018) Doing Survey Research: A Guide to Quantitative Methods. Routledge.
- [40] Chalmers, J. and Cowdell, F. (2021) What Are Quantitative and Qualitative Research Methods? A Brief Introduction. *Dermatological Nursing*, **20**, 45-48.
- [41] Curran, P.G. (2016) Methods for the Detection of Carelessly Invalid Responses in Survey Data. *Journal of Experimental Social Psychology*, **66**, 4-19. <https://doi.org/10.1016/j.jesp.2015.07.006>
- [42] Sürücü, L., Şeşen, H. and Maslakçı, A. (2023) Regression, Mediation/Moderation, and Structural Equation Modeling with SPSS, AMOS, and PROCESS Macro. Livre de Lyon.
- [43] Braun, V. and Clarke, V. (2006) Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, **3**, 77-101. <https://doi.org/10.1191/1478088706qp063oa>