Article

Swipe to Sustain: Exploring Consumer Behaviors in Organic Food Purchasing via Instagram Social Commerce

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Abstract: Promoting organic foods production and consumption contributes to accomplishing the United Nations' sustainable development goals. Social commerce provides a promising opportunity to develop the organic food industry. However, there is limited knowledge regarding customer behaviors in relation to purchasing organic foods via social commerce platforms. Therefore, this study expanded upon the unified theory of acceptance and use of technology (UTAUT-2) to develop a comprehensive model that explains how customers' social commerce trust and behavioral intentions to purchase organic foods using Instagram social commerce affect their purchasing behaviors. The research model was analyzed by employing partial least squares structural equation modeling (PLS-SEM) for the data collected from a quantitative survey of 410 customers who used Instagram to purchase organic foods in Iran. The results revealed that Instagram social commerce-facilitated purchasing conditions, hedonic motivations, social influence, ratings and reviews, and influencers' endorsements positively influenced customers' purchase intentions. Moreover, Instagram's recommendations and referrals, influencers' endorsements, as well as social influence boost customers' trust in the social commerce platform. Eventually, it was determined that influencers' endorsements, social commerce trust, and purchase intention determine a customer's organic foods purchasing behaviors. This research provides valuable insights for organic food marketers to optimize their social commerce strategies.

Keywords: sustainable development; organic food industry; social commerce; influencer marketing; UTAUT-2; purchase intention; social commerce trust; purchase behaviors; Iran

1. Introduction

With its rich agricultural heritage, Iran is recognized as one of the world's most ancient historical farming regions [1]. The economic foundation of this country is strongly dependent on agribusiness [2,3]. Iran's agribusiness revenue is predicted to increase significantly, from USD 94.79 billion in 2024 to USD 135.70 billion in 2028 [4]. In the fiscal year ending March 2023, Iran exported a total of USD 5.2 billion worth of agricultural products, accounting for 6.37% of its total non-oil exports [5]. Moreover, the agricultural industry constituted around 16% of Iran's overall employment [6]. Even though this industry plays a positive role in the economic growth of this country, it has also had a number of adverse environmental consequences [7]. One of the most urgent environmental issues that Iran is currently confronting is the severe threat of soil erosion [8]. The current estimated rate of soil erosion in Iran is 16.5 tons annually, which is five times higher than the average worldwide rate [9]. Soil erosion, as defined by the food and agriculture organization (FAO) of the United Nations (UN), refers to the accelerated loss of topsoil from the land's surface via water, wind, and cultivation [10]. The process of soil erosion can be significantly contributed to and expedited through unsustainable human practices, particularly agricultural intensification, the destruction of forests, and excessive pasture

usage, as well as unsustainable land use [10]. Soil erosion detrimentally affects the long-term sustainability of farmlands [11].

Fortunately, environmental concerns such as soil erosion can be effectively addressed through the implementation of organic agricultural practices [12–14], which is an essential component of sustainable development [15,16]. Organic-based agriculture offers solutions to the majority of challenges encountered in modern agriculture and food production, which ensures improved soil health and the sustainability of ecosystems [17–19]. The implementation of organic practices in the agriculture industry, which excludes the usage of synthetic fertilizers, is projected to result in a 40% reduction in nitrous oxide emissions from the soil per hectare [20]. In this regard, Skinner et al. [21] conducted experimental research in Switzerland to determine the distinctions and impacts of organic and non-organic agricultural practices. The results obtained from their investigation demonstrate that organic agricultural systems yield 40.2% less nitrous oxide emissions per hectare.

Organic foods are defined as foods and beverages that adhere to organic production regulations [19]. Iran's primary organic food products consist of saffron, pistachios, dates, walnuts, peaches, apples, olives, pomegranates, rice, tomatoes, potatoes, carrots, safflower, figs, and roses, as well as medical herbs [22]. Evidently, there has been a worldwide increase in customer demand for organic food products [23], and consumers' environmental and health concerns have become a significant factor driving this trend [24]. However, despite the global trend towards organic food production and consumption to improve human health and sustainability, there have been no significant efforts to organize and promote organic agriculture in Iran [25].

Even though organic agriculture has made progress in Iran [22,26], it still only makes up slightly more than 0.015% of the country's total agricultural acreage [27], which is significantly lower than the global rate of 1.6% [27]. Moreover, the current developments in Iran's agricultural sector are still far from meeting the target set in Iran's vision 2025, which aims to achieve a 25% compliance with organic agriculture principles [22]. One of the primary reasons for the comparatively small size of the organic food industry in developing countries, such as Iran, is the lack of readily available sales and marketing channels [28–31]. Notwithstanding these issues, organic food businesses might overcome challenges caused by limited access to conventional retail markets by expanding their operations toward social commerce marketing through social networking sites (SNS) [32,33].

Social commerce (SC) is an emerging technology within the realm of electronic commerce (e-commerce) that leverages SNS to facilitate online commerce activities and transactions [34]. The advent of SC technologies has transformed the landscape of online shopping by fostering robust connections between online businesses and their customers [35]. Meanwhile, the popularity of SNS facilitates the global expansion of SC [36], allowing customers to purchase online while also exchanging information, such as commenting on their shopping experiences and rating their overall satisfaction [37].

In 2022, the SC sector generated approximately USD 728 billion in income globally [38]. This number is anticipated to show a compound annual growth rate (CAGR) of 31.6% from 2023 to 2030 and reach around USD 6.2 trillion by the end of this period [38]. This figure underscores the significance of SC and emphasizes the importance of acknowledging its potential for businesses. Moreover, the crucial role of SC in promoting socio-economic stability is increasingly being recognized in the context of the COVID-19 pandemic and its aftermath [39–41]. Although there is considerable potential for the development of the organic food industry through SC platforms [42,43], there remains a lack of understanding regarding the factors that influence customers' behaviors in relation to using such platforms for purchasing organic food products [33,42,44].

In Iran's agribusiness sector, the intense competition in the e-commerce market and highly perishable nature of organic foods have led to the rapid growth of Instagram as an effective platform for consumers to buy organic foods [32]. Instagram is one of the most popular social networking platforms in the world, particularly among Iranian users [45,46]. In 2022, the value of SC on Instagram in Iran was estimated to be USD

84.4 million [47]. This platform was especially important to Iran's economy during the COVID-19 pandemic [48]. Leveraging Instagram as an SC platform for marketing and selling products and services is an emerging field of knowledge [49]. Thus, given the unique characteristics and functionalities of each SNS [50], Instagram was selected for this research to minimize potential biases that may arise from choosing multiple platforms.

The unified theory of acceptance and use of technology (UTAUT-2) [51] is employed as the theoretical foundation for the research model due to the fact it fulfills the underlying notion of this study, which is exploring costumers' behavioral intentions and actual behaviors towards using Instagram's social commerce technology for purchasing organic food products. Based on the literature reviews, the UTAUT-2 is one of the most comprehensive theories/models in the realm of individual consumer technology acceptance and usage behaviors owing to its holistic approach [52]. Moreover, UTAUT-2 has been tested in numerous studies, all of which have found it to be valid in explaining an individual's technology adoption in consumption circumstances [53–55].

The primary objective of this research is to address the knowledge gap in the field of organic food marketing, with a particular emphasis on SC via the Instagram platform. Therefore, it employs a holistic approach to explore consumer trust, intentions, and behaviors towards using Instagram social commerce, while taking into account the specific context of organic food products. The results of this study will make a significant contribution to the current social commerce literature and serve as a valuable resource for future researchers studying the organic food business in Instagram social commerce settings. Moreover, the findings of this study can greatly assist organic food businesses in enhancing the purchasing experience for their customers and optimizing their SC strategies.

This article is organized as follows: It commences with a synopsis of the SC literature and organic food sector. After presenting the research hypotheses and model, the research methodology and statistical analysis results are detailed. The paper concludes with research implications, limitations, and recommendations for future studies.

2. Literature Review

SC technology is commonly regarded as an extension of e-commerce, and is enhanced through web 2.0 (internet 2.0) capabilities and facilitates more user interaction and engagement [56]. The concept of SC was first used in 2005 when Yahoo.com launched "Yahoo Shoposphere" to describe a new collaborative shopping mechanism on its webpage [57]. Four years later, Flowers.com, which was a flower and gift business, established the first Facebook-based online marketplace in 2009, which can be considered as the formal launch of SNS-based commerce [58]. Scholars from various academic disciplines, ranging from social science, ICT, and marketing to consumer behavior, have been conducting studies exploring SC technologies [59]. The early studies predominantly centered on SC inception, distinguishing features, and architectural designs [60]. The current SC literature, however, primarily investigates the related variables that impact customers' purchasing intentions and behaviors [59].

In light of the rising popularity of SNS [61], and the growing usage of SC technologies [62], the organic food industry today has an unprecedented opportunity to develop and prosper by leveraging SNS-based SC technologies for marketing and selling their products [42,43]. However, there has been a scarcity of research that focuses on how consumers of organic food products perceive SNS-based SC as an online commerce channel for purchasing these products [33]. Furthermore, despite the vital role that consumer trust plays in SC [63], its determinants are still inadequately comprehended [64,65], especially in the Middle East's SC sector [66].

In addition, the current literature regarding the impact of social media influencers' (SMIs) endorsements on customers' online purchase intentions is limited [67]. In particular, additional investigation is required to ascertain how SMIs-based marketing influences consumers' behaviors in SC contexts [68,69]. Meanwhile, the overwhelming majority of previous studies on SMIs-based marketing have concentrated on the apparel, cosmetics, and

tourism businesses [68]. Therefore, there is a need for further research into the possible effectiveness of influencer-based marketing in other sectors, including the food industry [70]. Moreover, the existing SC studies have overtly focused on customers' purchase intentions as a proxy for their purchasing behaviors, neglecting the long-existing intention–behavior gap [71–73], which has limited their practical applications [74].

In order to address the aforementioned gaps, this study aims to investigate the underlying mechanisms that affect customers' SC trust and behavioral intentions toward buying organic food products through the Instagram platform. The notion of customers' trust is complex and has multiple aspects [63]. However, the present study concentrates specifically on the institutional dimension of trust that underlies Instagram as an SC platform. Hence, the combined questions in this research can be framed as follows: What are the determinants within the Instagram SC context that shape the customers' SC trust and their intention to engage in purchase behaviors on this platform, and how do these determinants impact their actual purchasing behaviors?

To ensure a comprehensive examination of the research questions, this study incorporated management-, person-, and technology-related factors. This research primarily examined the phenomenon of Instagram social commerce within the organic food industry at a managerial level. The factors classified within the person-related dimension encompass SC constructs, social media influencer endorsement, social influence, SC trust, purchase intention, and purchasing behaviors. Ultimately, the technology component encompassed elements such as the platform's accessible resources and capabilities for conducting online purchases. Accordingly, this paper explores a variety of social, technical, and socio-technical factors in an effort to develop a comprehensive framework that can be used to better understand the trust, intentions, and behaviors of the customers who employ Instagram as an SC platform for purchasing organic food products.

3. Development of Hypotheses and Research Model

Venkatesh et al. [51] define performance expectancy (PE) as practical utilities that impact an individual's inclination to adopt new technologies. PE has been identified as an important determinant of customers' purchase intentions in various online commerce channels, including omnichannel technology [75], fresh e-commerce platforms [76], online group buying platforms [77], and SC platforms [78]. Hence, it can be assumed that the customers' perceptions of Instagram's SC performance in relation to purchasing organic food products will have a direct impact on their purchase intention (PI), as well as an indirect impact on their purchasing behavior (PB) through the mediating role of PIs. Hence, the following hypotheses are formulated:

H1a. *PE has a positive and significant effect on PI.*

H1b. *PE mediates the relationship between PI and PB.*

The concept of effort expectancy (EE) describes a user's perception that a given technology is relatively simple to learn and use [51]. EE is recognized as a key factor affecting customers' purchase intentions across e-commerce technologies, such as online open market platforms [79], m-commerce applications [80], and SC platforms [78]. Therefore, this study postulated that consumers' perceptions regarding Instagram's ease of usage with regard to purchasing organic food products will significantly impact their purchase intentions, as well as their actual purchasing behaviors through the mediating role of PI. Accordingly, the following hypotheses have been developed:

H2a. *EE has a positive and significant effect on PI.*

H2b. *EE mediates the relationship between PI and PB.*

As defined by Venkatesh et al. [51], facilitating conditions (FCs) pertain to the users' perceptions regarding the extent to which a particular technology can assist them in effectively completing specific tasks. FCs serve as a fundamental predictor within the UTAUT-2 model, influencing users' intentions towards using new technologies [81]. It has been determined that platform-facilitated purchasing conditions favorably impact the customers' SC-based purchase intentions [82,83]. In the context of the current research, it is essential to take into consideration the recent developments in the SC capabilities of the Instagram platform [84]. These enhancements aim to streamline customers' online purchasing experiences [85]. Therefore, it can be expected that Instagram's SC facilitators have a direct impact on PI, as well as an indirect impact on PB via the mediating mechanism of PI. This line of reasoning resulted in the subsequent hypotheses:

H3a. *FC has a positive and significant effect on PI.*

H3b. *FC mediates the relationship between PI and PB.*

Hedonic motivation (HM) refers to the perception of enjoyment derived from using technologies [51]. The consumers who enjoy using Instagram for SC purposes have been reported to be significantly more inclined to purchase available products [49]. In this regard, Rahman et al. [65] stated that HM positively and significantly impacts a customer's propensity towards using SC platforms for purchasing perishable food products. Therefore, it can be anticipated that the hedonistic motives behind purchasing organic food products using Instagram social commerce directly impact customers' purchase intentions and indirectly impact their purchasing behaviors through the mediating role of PI. The aforementioned discussion resulted in the development of following hypotheses:

H4a. *HM has a positive and significant effect on PI.*

H4b. *HM mediates the relationship between PI and PB.*

The phenomenon in which the views of their peers influence an individual's decision to adopt and use a particular technology is known as social influence (SI) [51]. The impact of SI on customers' purchasing intentions across different online commerce technologies has been highlighted in earlier studies [65,86]. Moreover, it has been indicated that SI has favorable influence on customers' SC trust [87]. In this regard, Maulida et el. [88] stated that SI significantly affects customers' trust towards SC on the TikTok platform. In addition, SI holds significant relevance in current research due to the fact that Middle Eastern nations are typically characterized as collectivist cultures [89]. As a collectivist society, the decision-making processes of the Iranian people are profoundly affected by their social circles [89,90]. In light of these considerations, this study posits that SI has a favorable influence on both PI and SCT, as well as an indirect effect on PB via two mediators: PI and SCT. Accordingly, the following hypotheses have been formulated:

H5a. *SI has a positive and significant effect on PI.*

H5b. *SI mediates the relationship between PI and PB.*

H6a. *SI has a positive and significant effect on SCT.*

H6b. *SI mediates the relationship between SCT and PB.*

Social commerce constructs (SCCs) refer to the functionalities that have been added to e-commerce platforms with the aim of enhancing their interactivity [91]. This study investigated two components of SCCs: recommendations and referrals (RERs), and ratings and reviews (RARs). These SCCs are determined to have a positive impact on customers'

SC-based purchase intentions [41]. In addition, it has been stated that SCCs can help customers to manage the overwhelming amount of information in SC platforms and focus on the appropriate products and merchants [92]. In turn, perceived knowledge develops customers' trust towards the SC platforms being used [93]. Hence, this study hypothesized that SCCs have favorable influence on PI and SCT, as well as an indirect effect on PB via two mediators: PI and SCT. Accordingly, the following hypotheses have been developed:

H7a. *RERshave a positive and significant effect onPI.*

H7b. *RERs mediate the relationship between PI and PB.*

H8a. *RERshave a positive and significant effect onSCT.*

H8b. *RERs mediate the relationship between SCT and PB.*

H9a. *RARshave a positive and significant effect onPI.*

H9b. *RARs mediate the relationship between PI and PB.*

H10a. *RARshave a positive and significant effect onSCT.*

H10b. *RARs mediate the relationship between SCT and PB.*

Social media influencers (SMIs) are people who actively participate in creating and sharing information on their social media accounts and have become renowned for their expertise in various fields, such as fashion, beauty, fitness, and health [94]. Endorsements are widely employed by businesses as prominent SMI-based marketing strategies to promote their products [95–97]. A social media influencer's endorsement (SMIE) is found to be a significant determinant of customers' purchase intentions across online commerce technologies, including e-commerce [67], and SC platforms [88]. Moreover, there seems to be a notable correlation with consumer trust regarding SMIs and the technology that they endorse [98]. Given that Instagram is a popular platform for SMI-based marketing [96,99], this study posits that SMIEs enhance both PI and SCT. In addition, it has been stated that SMIEs have a significant impact on SC customers' purchasing behaviors [100]. Therefore, it is expected that SMIEs will favorably affect PB both directly and indirectly through the mediating roles of two factors: SCT and PI. The aforementioned considerations resulted in the development of the following hypotheses:

H11a. *SMIEs have a positive and significant effect on PI.*

H11b. *SMIEs mediate the relationship between PI and PB.*

H12a. *SMIEs have a positive and significant effect on SCT.*

H12b. *SMIEs mediate the relationship between SCT and PB.*

H13. *SMIEs have a positive and significant effect on PB.*

Social commerce trust (SCT) refers to customers' perceptions of the provided assistance and support on a given SC platform, which simplifies their online purchasing experience [64]. It has been argued that trust facilitates online transactions in SC settings [66,101]. Moreover, it has been stated that trust positively influences customers' SC-based purchase behaviors [102]. Accordingly, this study proposes that SCT significantly influences PB. Hence, the hypothesis that follows was developed:

H14. *SCThas a positive and significant effect onPB.*

It has been determined that consumers' behavioral intentions regarding using online commerce platforms play a crucial role in shaping their subsequent usage behaviors [103]. This research posits that customers' behavioral intentions towards using the Instagram platform for purchasing organic food products significantly and positively impact their subsequent purchasing behaviors. Accordingly, the following hypothesis is proposed:

H15. *PIhas a positive and significant effect onPB.*

The credibility of the UTAUT-2 as one of the most comprehensive models for explaining the technology acceptance and usage behaviors of individual consumers [104] makes it the most suitable model for current investigation. Nevertheless, in order to further enhance the applicability of the UTAUT-2 model in the context of SC on Instagram, this study expanded it through incorporating SCCs and SMIEs as novel exogenous constructs. In addition, SCT has been introduced as an additional mediation mechanism within the UTAUT-2's framework. This study further considers the impact of three demographic variables, namely customers' age, gender, and frequency of using SC (SCF), in order to perform a thorough analysis and ensure that the empirical findings are not influenced by other factors. Accordingly, a thorough analysis is conducted on the paths through which consumers' usage of Instagram social commerce is influenced by SCT, SMIEs, and PI. Throughout these interactions, various aspects are taken into account, including sociability, practicality, and the alignment between the socio-personal and technological elements. Figure 1 illustrates the model constructed for this research.
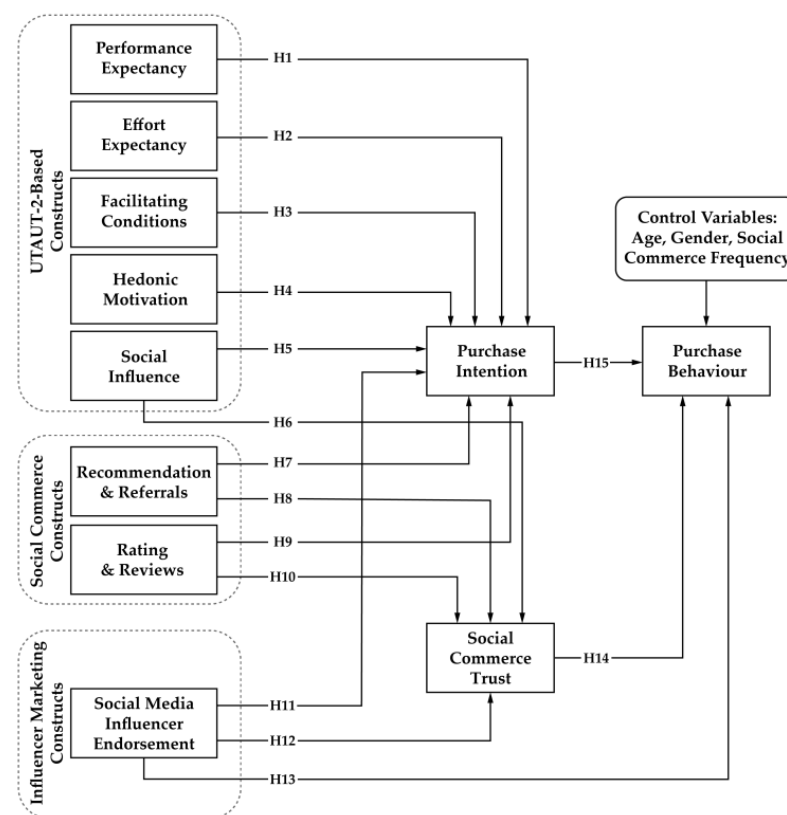

Figure 1. Research model.

4. Research Methodology

4.1. Research Design

Exploratory descriptive research was conducted in this study by using a quantitative online survey to investigate the research hypotheses. However, in order to determine potential factors influencing consumers' intentions and behaviors when using Instagram social commerce to buy organic foods, this research first undertook a qualitative stage. This was followed by a quantitative phase that included the use of an online survey instrument for data collection and data validation analysis. The two stages of the study are addressed in the sections that follow.

4.2. Qualitative Stage

For the qualitative phase, 10 customers who had previously used Instagram as a means of purchasing organic food products were the subjects of semi-structured interviews [105]. A convenience approach was used to identify customers with varying sociodemographic attributes. The goal of the 20 min online interviews was to find out the considerations customers have when deciding whether or not to use Instagram social commerce for organic food purchases. Therefore, semi-structured guidelines have been adopted, including questions regarding the frequency of their SC usage, the products they frequently search for and intend to purchase through Instagram, and the attributes that are thought to be most crucial for completing the process of buying organic foods via Instagram social commerce. The respondents were further asked to provide information relevant to their most recent Instagram-based purchases along with the factors that affect their decision to make an online purchase on this platform. Lastly, the interviewees were questioned on the extent to which their trust in a social commerce platform might be influenced by recommendations and referrals about the organic food products available on that platform, including opinions from peers, recommendations from social media influencers, and the ratings and reviews posted by other people about their experience using the platform for the purchase of organic foods.

The data gathered from the interviews were then analyzed by employing the categorical analysis method, which included creating categories using interpretative steps [106]. The interview results validated some of the most frequently cited variables in the literature, as well as the UTAUT-2 factors, as influencing factors on consumers' intentions to make purchases online on Instagram, their perception of trust in the platform, and their actual use of the platform for purchasing organic foods. However, it has been noted that the majority of the interviewees emphasize trust in the platform as an important requirement when performing online purchases. Also, aspects such as being a platform recommended by the important people in their social circle, and that platform being endorsed by trusted people, such as social media influencers, are some of the primary ways to ensure that the platform is trustworthy for being used as a means of online shopping.

In addition, expert interviews were carried out in order to gain their insights regarding the research model. Acquiring insight from subject matter experts can add a great deal of value to the research due to the fact their perspectives and knowledge are grounded in first-hand observations and experiences. The expert reviewers in this study were chosen based on their relevant experience and related projects. Accordingly, a panel of 20 experts, including academic experts in the field of customer behavior and business owners and executives from top organic food companies operating in Iran's SC market, were selected to review and evaluate the research findings. The experts were provided with an introduction to the study, including its objective. The experts' assessments of the research model demonstrate that it holds the potential to illustrate customers' trust, intentions, and behaviors with regard to purchasing organic food products through Instagram social commerce. The results of the qualitative stage demonstrate that the convenience of using the platform for online shopping, the trust that users have in it, the recommendations and referrals made by other users, the reviews shared by other users, the practicality of the platform for making online purchases, and the recommendations of key figures, such as social media influencers

and trusted friends and family members, are what motivate customers to use Instagram social commerce for purchasing organic foods.

4.3. Quantitative Stage

The variables incorporated within the research framework were measured using a psychometric instrument, and the numerical information that was eventually collected was analyzed using statistical procedures [107]. Employing a quantitative method helps ensure that the findings of this study can be generalized and replicated [107]. This study focused on Iranian individuals aged eighteen and above who had experience purchasing organic food products through Instagram's social commerce platform. A cross-sectional study was undertaken to gather the information from the research sample. In order to test the research hypotheses, partial least squares structural equation modeling (PLS-SEM) was performed using Smart-PLS 4. PLS-SEM is appropriate for conducting exploratory research [108], and PLS is one of the most commonly employed structural equation modelling (SEM) methods in social science [109]. Moreover, this study presented a comprehensive model with eleven latent and forty-two observed variables, with PLS-SEM being highly efficient at estimating such a complex model [110].

4.4. Measurement Development

The measured constructs in this research were derived from previous studies and adapted to align with the specific context of SC on Instagram. A seven-point Likert scale was used [111]. The survey items used for PE, EE, SI, HM, FC, and PI were adapted from Venkatesh et al. [51]. The measures employed for SCCs were adapted from Li et al. [91]. The items used for measuring SCT were adapted from Sharma et al. [64] and operationalized into an Instagram social commerce context. The measures used for SMIEs were adapted from Alotaibi et al. [112]. Lastly, the survey items for PB were adapted from Saffanah et al. [113], who first developed them in relation to Instagram social commerce.

These measurement items were further subjected to multiple tests in order to validate their capacity for assessing the components within the proposed research model. In order to ascertain the reliability of the survey items, a panel of 4 university professors specializing in marketing and economics, 10 business experts, and 5 individuals with prior experience of using Instagram for online purchases assessed the survey items and provided their feedback. The survey's validity was confirmed in light of the minor modifications recommended by the reviewers. Afterward, a pilot study including a sample of 50 participants was conducted to verify the precision of the initial scales and ascertain their appropriateness for the intended purpose [114]. Given the findings of the pilot test, all of the variables exhibited a high degree of internal consistency and proved to be reliable.

4.5. Data Collection

Because the public does not yet have access to a list of customers who use this platform for shopping purposes in Iran, non-probability and purposive sampling methods were used to collect the data [107]. The survey was carried out online using the JotForm platform. Following the recommendations of Podsakoff et al. [115], the prerequisite for the data collection procedure in this study was to ensure that the participants' responses were grounded in concrete experiences with Instagram-based shopping, rather than hypothetical ones. Thus, by incorporating attention checker and screening questions, Iranian adults aged 18 and above with experience of using Instagram for purchasing organic food products over the six months leading up to the data collection period were selected as participants for completing the questionnaire.

The survey's link was circulated via several social networking platforms, including Facebook, X (formerly known as Twitter), TikTok, and Instagram, from mid-November 2023 to 25 December 2023. The respondents were assured of the confidentiality and anonymity of the information they provided, which enabled them to express themselves openly and share their genuine opinions and feelings [114]. After checking for missing values and removing

the univariate and multivariate outliers, a total of 410 valid, accurate responses from 1377 participants made up the final data set for the current investigation. The statistical software SPSS 29 was used to obtain descriptive statistics on the demographics of the respondents (Table 1).

Table 1. Participants demographics (*n* = 410).

Demographic		Frequency	Percentage %
Gender	Male	151	36.8%
	Female	259	63.2%
Age	18–24	28	6.8%
	25–34	176	42.9%
	35–44	158	38.5%
	45–54	37	9%
	55–64	11	2.7%
Social Commerce Frequency	Multiple times a day	18	4.4%
	Daily (once a day)	10	2.4%
	Very often (4–6 times a week)	31	7.6%
	Often (2–3 times a week)	47	11.5%
	Sometimes (once a week)	47	11.5%
	Occasionally (2–3 times a month)	118	28.8%
	Rarely (once a month or less)	139	33.9%

5. Data Analysis and Results

In this research, a two-stage assessment, which included the measurement model and structural model analysis, was carried out [108]. The following sub-sections discuss the results obtained in each of these steps.

5.1. Measurement Model

The measurement model's assessment in this study included evaluations of the consistency and reliability, as well as convergent and discriminant validity [108]. According to the results reported in Table 2, the majority of the items demonstrate excellent outer loadings exceeding 0.7. However, four items, including FC4, RERs4, SCT1, and SCT4, exhibited loadings that fall within the acceptable range from 0.45 to 0.70 [116].

The Cronbach's alpha (CA) test was used to evaluate the internal consistency of the variables. As shown in Table 2, all of the scales had sufficient CA values that fell between 0.70 and 0.901, with the exception of FC (CA = 0.69), which had a value that could be considered as minimally acceptable [117]. Also, the construct reliability (CR) values of all the latent variables surpassed the required minimum of 0.7 [118]. In light of the results from the CA and CR analyses, it can be concluded that the scales demonstrate an adequate level of reliability. Moreover, all the average variance extracted (AVE) values exceed the cut-off value of 0.5 [118]. Accordingly, the measurement model's analysis results revealed that the research constructs have satisfactory convergent validity, and the measurement model exhibited good internal consistency. The discriminant validity was evaluated using the heterotrait–monotrait (HTMT) criteria [119]. The measurement items did not display any cross-loadings. Also, as demonstrated in Table 3, in all instances, the HTMT values are lower than the recommended threshold of 0.90 [120], indicating that the discriminant validity criteria were accomplished.

5.2. Common Method Bias (CMB)

The common method bias (CMB) is a prevalent measurement error that occurs when researchers attribute variations in outcomes to factors other than the construct under investigation [108]. The percentage of variation that may be attributable to CMB differs according to the research field [120]. In behavioral research, CMB might occur when the co-variance accounted for by a single component exceeds 40.7% [115]. To mitigate this bias,

we first took measures to ensure that all the participants had a clear understanding of the survey's confidentiality protocols as well as the nature of the questions being asked. Next, we performed Harman's one-factor test. The common factor accounts for 34.924% of the variance in the model, indicating that CMB was not a major issue in this study.

Table 2. Cross-loading, validity, and reliability.

Construct	Items	Mean	Std. Deviation	Outer Loadings	Cronbach's Alpha ∂	CR	AVE	VIF
Performance Expectancy	PE1	5.55	1.209	0.789	0.773	0.869	0.688	1.407
	PE2	5.47	1.286	0.847				1.795
	PE3	5.54	1.306	0.851				1.740
Effort Expectancy	EE1	5.79	1.248	0.766	0.810	0.874	0.634	1.710
	EE2	5.61	1.256	0.799				1.692
	EE3	5.64	1.232	0.817				1.636
	EE4	5.70	1.263	0.802				1.591
Facilitating Condition	FC1	5.58	1.297	0.711	0.690	0.810	0.517	1.335
	FC2	5.64	1.251	0.716				1.337
	FC3	5.59	1.258	0.758				1.284
	FC4	5.49	1.395	0.689				1.270
Hedonic Motivation	HM1	5.32	1.365	0.867	0.838	0.902	0.755	2.036
	HM2	5.25	1.363	0.874				1.907
	HM3	5.36	1.376	0.865				1.955
Social Influence	SI1	5.05	1.351	0.895	0.841	0.904	0.759	2.324
	SI2	4.99	1.335	0.848				1.800
	SI3	4.93	1.470	0.869				2.050
Recommendation and Referrals	RERs1	5.49	1.397	0.712	0.756	0.843	0.575	1.480
	RERs2	5.06	1.437	0.829				1.577
	RERs3	5.27	1.469	0.791				1.613
	RERs4	5.70	1.219	0.693				1.308
Rating and Reviews	RARs1	5.51	1.214	0.736	0.700	0.831	0.621	1.366
	RARs2	5.01	1.364	0.826				1.340
	RARs3	5.19	1.424	0.800				1.389
Social Media Influencer Endorsement	SMIEs1	4.44	1.877	0.847	0.901	0.927	0.717	2.439
	SMIEs2	4.52	1.814	0.832				2.371
	SMIEs3	4.52	1.791	0.881				2.868
	SMIEs4	4.20	1.914	0.857				2.639
	SMIEs5	4.94	1.748	0.815				2.051
Purchase Intention	PI1	5.29	1.181	0.860	0.817	0.891	0.732	1.916
	PI2	5.13	1.308	0.863				1.884
	PI3	4.95	1.399	0.844				1.687
Social Commerce Trust	SCT1	5.43	1.360	0.694	0.842	0.883	0.559	1.524
	SCT2	4.88	1.518	0.813				2.003
	SCT3	4.99	1.501	0.818				2.218
	SCT4	5.46	1.398	0.630				1.811
	SCT5	4.71	1.738	0.784				2.155
	SCT6	5.62	1.339	0.729				1.880
Purchase Behavior	PB1	4.97	1.546	0.886	0.901	0.931	0.771	2.710
	PB2	5.11	1.473	0.875				2.529
	PB3	5.11	1.555	0.893				2.882
	PB4	5.01	1.711	0.858				2.292

Table 3. Discriminant validity (HTMT).

	EE	FC	HM	PB	PE	PI	RARs	RERs	SCT	SI	SMIEs
EE											
FC	0.839										
HM	0.537	0.719									
PB	0.228	0.463	0.519								
PE	0.690	0.858	0.655	0.436							
PI	0.429	0.667	0.630	0.865	0.607						
RARs	0.371	0.520	0.511	0.525	0.491	0.597					
RERs	0.443	0.621	0.518	0.570	0.564	0.570	0.655				
SCT	0.359	0.646	0.649	0.787	0.575	0.771	0.617	0.723			
SI	0.407	0.620	0.637	0.652	0.635	0.689	0.545	0.538	0.673		
SMIEs	0.109	0.367	0.437	0.737	0.347	0.639	0.576	0.553	0.817	0.546	

5.3. Structural Model Analysis

The structural model offers insights into the degree to which the theoretical model accurately predicts the expected relationships [108]. In accordance with the principles recommended by Hair et al. [108], this study assessed the structural model through the following procedure: (1) testing for multicollinearity issues, (2) the assessment of the path coefficient, (3) the assessment of the coefficient of determination (R^2), (4) the assessment of effect size (f^2), and (5) the assessment of predictive relevance (Q^2).

The variance inflation factor (VIF) values range from 1.270 to 2.882, as reported in Table 2. The determined values are below the threshold of five [108] and are relatively close to three or lower, aligning with the recommended optimal range suggested by Hair et al. [108]. In light of these results, it can be concluded that there is no cause for concern regarding collinearity issues among the predictor variables [108].

This study used a resampling bootstrap method to assess both the size and significance of the path coefficients, in which 410 samples were drawn 5000 times [121]. However, when bootstrapping is conducted using non-normal data, it is plausible that the final distributions will exhibit peakedness and skewness [108]. To address this concern, bias-corrected and accelerated (BCa) bootstrapping, which effectively adjusts for the impact of skewness on confidence intervals, was applied in this research [108].

As reported in Table 4, the analysis results indicate that FC ($\beta = 0.132$, $t = 2.246$, $p < 0.05$), HM ($\beta = 0.121$, $t = 2.059$, $p < 0.05$), SI ($\beta = 0.198$, $t = 4.059$, $p < 0.001$), RARs ($\beta = 0.081$, $t = 2.008$, $p < 0.05$), and SMIEs ($\beta = 0.296$, $t = 5.764$, $p < 0.001$) stand out as the significant predictors of PI. Accordingly, Hypotheses 3a, 4a, 5a, 9a, and 11a were confirmed. Meanwhile, it has been determined that there is no statistically significant relationship between PE, EE, and RERs and PI, leading to the rejection of Hypotheses 1a, 2a, and 7a. The effect size measurements indicated that RARs ($f^2 = 0.009$), FC ($f^2 = 0.016$), HM ($f^2 = 0.017$), SI ($f^2 = 0.045$), and SMIEs ($f^2 = 0.104$) contribute to the R^2 value of PI, explaining a relatively small-to-moderate proportion of the variance [122].

Addressing the determinants of SCT, a significant positive effect of SI ($\beta = 0.210$, $t = 5.535$, $p < 0.001$), RERs ($\beta = 0.238$, $t = 5.462$, $p < 0.001$), and SMIEs ($\beta = 0.490$, $t = 12.097$, $p < 0.001$), on SCT has been found, thus supporting Hypotheses 6a, 8a, and 12a. On the other hand, the direct effect of RARs on SCT was determined to be statistically non-significant. Thus, hypothesis 10a was rejected. The effect size measurements revealed that SI ($f^2 = 0.085$), RERs ($f^2 = 0.103$), and SMIEs ($f^2 = 0.428$) demonstrate a moderate to large degree of explanatory power with respect to the R^2 value of SCT [122].

Table 4. Results of structural model (hypotheses).

Path	Hypothesis	Std. Beta (β)	Std. Deviation	*t*-Values	*p*-Values	Decision
PE $\longrightarrow$ PI	H1a	0.072	0.058	1.244	0.213 (NS)	Rejected
EE $\longrightarrow$ PI	H2a	0.065	0.061	1.064	0.288 (NS)	Rejected
FC $\longrightarrow$ PI	H3a	0.132	0.059	2.246	0.025 *	Supported
HM $\longrightarrow$ PI	H4a	0.121	0.059	2.059	0.040 *	Supported
SI $\longrightarrow$ PI	H5a	0.198	0.049	4.059	0.000 ***	Supported
SI $\longrightarrow$ SCT	H6a	0.210	0.038	5.535	0.000 ***	Supported
RERs $\longrightarrow$ PI	H7a	0.027	0.043	0.619	0.536 (NS)	Rejected
RERs $\longrightarrow$ SCT	H8a	0.238	0.044	5.462	0.000 ***	Supported
RARs $\longrightarrow$ PI	H9a	0.081	0.040	2.008	0.045 *	Supported
RARs $\longrightarrow$ SCT	H10a	0.049	0.041	1.212	0.226 (NS)	Rejected
SMIEs $\longrightarrow$ PI	H11a	0.296	0.051	5.764	0.000 ***	Supported
SMIEs $\longrightarrow$ SCT	H12a	0.490	0.041	12.097	0.000 ***	Supported
SMIEs $\longrightarrow$ PB	H13	0.247	0.049	5.033	0.000 ***	Supported
SCT $\longrightarrow$ PB	H14	0.212	0.052	4.074	0.000 ***	Supported
PI $\longrightarrow$ PB	H15	0.457	0.041	11.100	0.000 ***	Supported
Control Variables						
Age		0.100	0.063	1.590	0.112 (NS)	
Gender		−0.002	0.061	0.034	0.973 (NS)	
SC Frequency		−0.108	0.059	1.841	0.066 (NS)	

Note: *** $p < 0.001$; * $p < 0.05$; NS = not significant.

With regard to the direct paths to PB, the analysis results indicated that SMIE ($\beta = 0.247$, $t = 5.033$, $p < 0.001$), SCT ($\beta = 0.212$, $t = 4.074$, $p < 0.001$), and PI ($\beta = 0.457$, $t = 11.100$, $p < 0.001$) all exert a significant and favorable impact on PB. Accordingly, Hypotheses 13, 14, and 15 were confirmed. The effect size measurements indicated that SCT ($f^2 = 0.052$) and SMIEs ($f^2 = 0.081$) hold a moderate effect size, whereas PI ($f^2 = 0.347$) demonstrated a large effect size [122].

It was determined that the control variables have no significant impact on PB. It must be noted that the slight reduction in R^2 values from 66.8% to 66.3% after removing the control variables shows that these variables accounted for only the marginal variance in customers' Instagram-based purchasing behaviors. Table 4 provides an informative overview of the results obtained from the path analysis in the current research.

The Q^2 value, which is used to assess the predictive relevance [99], can be determined using a blindfolding procedure [108]. The results of this research indicate that it holds a strong predictive relevance for the variables, with Q^2 values of 0.484, 0.632, and 0.525 for PI, SCT, and PB, respectively [108]. Moreover, the R^2 coefficients of PI (0.513), SCT (0.643), and PB (0.668) were all found to be satisfactory [108]. Accordingly, this study's model has a robust ability to explain customers' trust, intentions, and behaviors in the context of purchasing organic food products through Instagram social commerce.

5.4. Mediation Effects

The mediation analysis procedure requires the following primary steps: evaluating the significance and size of indirect effects and identifying the type of mediation effects [123]. In this research, the mediation roles of PI and SCT were evaluated by performing BCa bootstrap estimation (5000 times) [108].

Addressing the indirect effects on PB through the mediating mechanism of PI, the mediation analysis results revealed the significant and positive effects of FC ($\beta = 0.060$,

$t = 2.191$, $p < 0.05$), HM ($\beta = 0.055$, $t = 2.017$, $p < 0.05$), SI ($\beta = 0.091$, $t = 3.506$, $p < 0.001$), and SMIEs ($\beta = 0.136$, $t = 5.422$, $p < 0.001$). The 97.5% confidence intervals that were bias-corrected for the indirect effects of FC (LL = 0.008, UL = 0.116), HM (LL = 0.005, UL = 0.114), SI (LL = 0.044, UL = 0.147), and SMIEs (LL = 0.094, UL = 0.194) do not include zero, indicating the existence of mediation effects [124]. These outcomes provide support for the research Hypotheses 3b, 4b, 5b, and 11b. Nevertheless, the indirect effects of PE, EE, RERs, and RARs on PB via the mediating function of PI have been found to be statistically insignificant, leading to the rejection of Hypotheses 1b, 2b, 7b, and 9b. Considering the significant direct influence of FC, HM, SI, and SMIEs on PI (see Table 4), the indirect effects of these constructs on PB via PI's mediating role could be described as complementary partial mediation [108].

Regarding the indirect paths to PB via the mediating function of SCT, the mediation analysis outcomes indicated the significant positive impacts of SI ($\beta = 0.045$, $t = 3.092$, $p < 0.01$), RERs ($\beta = 0.051$, $t = 3.233$, $p < 0.001$), and SMIEs ($\beta = 0.104$, $t = 3.807$, $p < 0.001$). The 97.5% confidence intervals that were bias-corrected for the indirect effect of SI (LL = 0.020, UL = 0.077), RERs (LL = 0.024, UL = 0.085), and SMIEs (LL = 0.053, UL = 0.158) do not include zero, demonstrating the presence of the mediation effects [124]. These outcomes provide support for Hypotheses 6b, 8b, and 12b. Furthermore, the indirect effect of RARs on PB via SCT's mediation role was found to be non-significant, which led to the rejection of hypothesis 10b. Taking into account the significant direct positive impacts of SI, RERs, and SMIEs on SCT (see Table 4), the indirect influence of these constructs on PB via the mediating function of SCT can be characterized as being complementary partial mediation effects [108]. Table 5 provides a summary of the mediation analysis results.

Table 5. Mediation effect on the structural model paths.

Path	Hypothesis	Std. Beta (β)	Std. Deviation	*t*-Value	*p*-Value	Confident Interval (BC) LL	UL	Decision	Mediation Effect
PE ⟶ PI ⟶ PB	H1b	0.033	0.026	1.243	0.214 (NS)	−0.017	0.087	Rejected	No Effect
EE ⟶ PI ⟶ PB	H2b	0.030	0.028	1.074	0.283 (NS)	−0.027	0.081	Rejected	No Effect
FC ⟶ PI ⟶ PB	H3b	0.060	0.028	2.191	0.028 *	0.008	0.116	Supported	Partial Mediation
HM ⟶ PI ⟶ PB	H4b	0.055	0.027	2.017	0.044 *	0.005	0.114	Supported	Partial Mediation
SI ⟶ PI ⟶ PB	H5b	0.091	0.026	3.506	0.000 ***	0.044	0.147	Supported	Partial Mediation
SI ⟶ SCT ⟶ PB	H6b	0.045	0.014	3.092	0.002 **	0.020	0.077	Supported	Partial Mediation
RERs ⟶ PI ⟶ PB	H7b	0.012	0.020	0.615	0.539 (NS)	−0.025	0.053	Rejected	No Effect
RERs ⟶ SCT ⟶ PB	H8b	0.051	0.016	3.233	0.001 ***	0.024	0.085	Supported	Partial Mediation
RARs ⟶ PI ⟶ PB	H9b	0.037	0.019	1.956	0.050 (NS)	0.001	0.075	Rejected	No Effect
RARs ⟶ SCT ⟶ PB	H10b	0.010	0.009	1.155	0.248 (NS)	−0.007	0.030	Rejected	No Effect
SMIEs ⟶ PI ⟶ PB	H11b	0.136	0.025	5.422	0.000 ***	0.094	0.194	Supported	Partial Mediation
SMIEs ⟶ SCT ⟶ PB	H12b	0.104	0.027	3.807	0.000 ***	0.053	0.158	Supported	Partial Mediation

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; NS = not significant.

6. Discussion of Key Findings

In relation to the UTAUT-2-based factors, the results of this research indicate that facilitating conditions, hedonic motivations, and social influence all have a significant and

positive impact on consumers' purchase intentions, which in turn, indirectly influences their purchase behaviors through the mediation role of purchase intention. The study's outcomes further demonstrate that social influence plays a significant and positive role in boosting consumers' social commerce trust, which in turn functions as a mediating factor to indirectly affect consumers' purchasing behaviors. This outcome is consistent with the conclusions of earlier investigations that have been carried out in the context of social commerce through social networking platforms [87,88].

Nevertheless, it was determined that neither the direct effects of performance or effort expectancies on purchase intention nor their indirect effects on purchase behavior through the purchase intention's mediation role were statistically significant. These outcomes bring up the question of why these influential constructs in the UTAUT-2 model did not have any significant impact in the context of current investigation. One possible explanation for the obtained results is that the impact of the UTAUT-2 components is subject to variation depending on the specific conditions and populations under investigation [125]. For example, effort expectation has had a substantial impact on social commerce customers in the contexts of Sweden [126], France [127], Spain [128], and China [78], whereas its impact has not been significant in some other research populations, such as Tunisia [129], Türkiye [130], Indonesia [131], Vietnam [132], and Qatar [133]. In the scope of the current research, the possible explanation for the insignificant effects performance and effort expectancies might be that Instagram is the most popular social network site in Iran [134] and the preferred platform for social commerce [48,135]. Given these circumstances, Iranian customers may not prioritize the ease of use and social commerce performance of Instagram, as they are already familiar with it and proficient in utilizing the platform's commercial functionalities.

Concerning the social commerce constructs, it has been found that, in contrast to recommendations and referrals, which had no significant effect on purchase intentions, the influence of ratings and reviews on customers' purchasing intention was determined to be significant. On the other hand, customers' social commerce trust is significantly and favorably influenced by recommendations and referrals, whereas the impact of ratings and reviews on customers' social commerce trust was statistically insignificant. Furthermore, the mediation analysis results indicated that recommendations and referrals have a substantial and positive impact on consumers' purchasing behavior through the mediating role of social commerce trust, whereas ratings and reviews did not have any significant indirect effect on consumers' purchasing behaviors. These finding are especially important considering the fact that companies aim to gain a competitive edge by establishing effective social commerce constructs early on, rather than allocating their limited resources evenly across all components [136].

Based on these outcomes, recommendations and referrals from acquaintances are more valuable to social commerce customers than reviews and ratings posted by anonymous users. The potential cause for such an outcome could be the pervasive presence of misleading or deceptive ratings and reviews across online shopping platforms. Nowadays, people can easily rate a business or leave reviews regarding their previous purchasing experiences on various SNS thanks to the development of social networking technologies [84]. Meanwhile, countless companies are employing various methods for generating fake consumer reviews and display ratings submitted by consumers higher than the actual ones to increase the attractiveness or defame their competitors [137]. Online platforms' comment sections are becoming increasingly overloaded with false reviews, leading to customer mistrust and uncertainty [138]. In such circumstances, recommendations from people they know became more valuable to Instagram's social commerce customers than reviews and ratings posted by anonymous users.

In addition, the current research underscores the significance of influencer marketing, particularly through influencer endorsement mechanisms in the context of Instagram social commerce. The findings of this study demonstrate that customers' intentions to purchase organic food products on Instagram and their social commerce trust are both significantly impacted by influencer endorsement. These results are consistent with the

findings of several earlier investigations [67,88]. Moreover, in accordance with Fakhreddin and Foroudi [100], this study's results revealed that the impact of influencer endorsement on social commerce consumers' purchasing behaviors is significant. The mediation analysis outcomes further revealed that the indirect effects of influencer endorsement on customers purchasing behaviors are statistically significant. Purchase intention and social commerce trust acted as mediators for these indirect effects. This builds upon the findings of Alotaibi et al. [112], which demonstrated that influencer marketing enhances customers' trust in Instagram social commerce along with their intentions to make purchases using the platform.

Moreover, in line with the findings of Zhao et al. [139], the current study's results demonstrate customers' social commerce trust significantly affects customers' behaviors towards using this platform for the purpose of purchasing organic food products. These findings expand on the conclusions of the research conducted by Liu et al. [140], which stated that the customers' trust in SC platforms plays a significant role in shaping their purchase intentions.

Finally, in accordance with the findings of Mutambik et al. [141] and Vatanasakdakul et al. [142], this study determined that a significant correlation exists between the customers' behavioral intentions to use Instagram to purchase organic foods and their subsequent actual purchasing behaviors.

7. Implications

7.1. Academic Implications

The academic implications of this study are three-fold. First of all, this study takes a comprehensive approach to investigate consumers' intentions and behaviors toward using Instagram social commerce while taking into account the specific context of organic food products, acknowledging that customers consider multiple characteristics of products and platforms when making purchasing decisions. Thus, the results of this study have considerable value for marketing scholars and serve as a great resource for future researchers who want to investigate the online organic food sector. The application of social commerce models, particularly within the organic food sector, could be improved by making reference to this study.

Second, building upon prior UTAUT-2 developments in the SC context [143–145], this study broadened the scope of the UTAUT-2 model through the incorporation of new exogenous variables (social commerce constructs and influencer endorsement), presenting a fresh perspective on behavioral intention (intention to purchase organic foods using Instagram social commerce), and including a new concept of technology usage behavior (the utilization of Instagram social commerce for purchasing organic foods). In addition, by introducing trust as an additional mediating mechanism into the structure of the UTAUT-2 model, this research addressed the gap in knowledge concerning consumers' social commerce behaviors [66], particularly in relation to the Instagram platform [146]. In accordance with the findings of this research, social commerce trust, purchase intention, and influencer endorsement significantly predict consumers' purchase behaviors with an R^2 value equal to 66.8%. Accordingly, compared to the UTAUT-2, the developed model made a significant improvement in the variance explained in individuals' behaviors (from 52% to 66.8%). Accordingly, the results obtained from this research provide fresh perspectives on the UTAUT-2's applicability, opening up new opportunities for further social commerce studies.

Third, the reduction in the 'intention–behavior gap' is a significant concern in customer behavior research, particularly as it pertains to customers' organic foods purchasing behaviors [147,148]. The current paper, however, addressed this knowledge gap by illustrating the critical significance of social media influencer endorsements in shaping customers' purchase intentions and behaviors, as well as mediating the intention–behavior relationship as it relates to the usage of Instagram social commerce for purchasing organic food products.

7.2. Practical Implications

Acquiring insights into consumers' purchasing behaviors can have a substantial impact on the marketing strategies of organic food businesses, which ultimately helps them in achieving sustainable growth [25]. In today's world of collaborative social networking, where retailers and consumers have become increasingly reliant on social network platforms [24,149], the outcomes of this study are expected to assist organic food businesses in Iran and other developing countries through offering in-depth insights towards customers' organic foods purchasing intentions and behavior in the context of Instagram social commerce, subsequently assisting them to optimize their marketing strategies.

The results of this study reveal that implementing the social commerce functionalities that facilitate consumers' purchasing procedures significantly and favorably affects their intentions and behaviors regarding the use of Instagram to purchase organic food products. In light of these findings, organic food businesses have to optimize the commercial layout of their business pages on Instagram, either directly by leveraging the platform's commercial capabilities (e.g., Insta-Shop, checkout button, and taggable posts) or indirectly through a third-party application program interface (API).

Furthermore, this study illustrated that recommendations and referrals directly and positively affect customers' trust in social commerce platforms, and indirectly affect their purchase behaviors through the mediation roles of social commerce trust. Accordingly, organic food businesses may encourage customers to recommend (e.g., sharing with their peers) their products to other users. In addition, this research has demonstrated that social media influencer endorsements, as a form of influencer marketing, have a substantial and favorable effect on customers' social commerce trust, their behavioral intentions, and their actual usage of Instagram for the purpose of purchasing organic food products. Hence, businesses can incorporate the findings of this study to enhance their social media marketing strategies.

7.3. Social Implications

Organic food businesses operating in developing nations experience major challenges when it comes to penetrating conventional retail markets [31]. The results of this research will be beneficial for these companies to effectively market and sell their products through Instagram social commerce. It has been observed that increased availability will lead to a rise in the consumption of organic foods, which could ultimately be beneficial for public health and environmental sustainability [150,151]. Thus, this study has the potential to promote sustainability by facilitating the expansion of the organic food sector, which would make a significant contribution to the sustainable development goals (SDGs) of the United Nations, especially goal number twelve (SDG-12), which is related to fostering environmentally friendly patterns of consumption and production [152].

8. Limitations and Future Research

Despite its significant theoretical and practical implications, this research has some limitations. First of all, this study relies on the individuals' self-reported data regarding their technology usage behavior. Although a similar approach had been employed for establishing the UTAUT-2 model, it would be ideal to assess the users using real-world behavioral data (i.e., purchasing, rating, reviews, referrals, and so on). Moreover, this study focused on the purchase intentions and behaviors of social commerce customers. This calls for an additional investigation into the customer's whole shopping journey, including their post-purchase behaviors. Furthermore, the model developed for this research cannot be generalized to all SNS (e.g., X, Facebook, and TikTok) or product categories (e.g., everyday convenience goods, home appliances, fashion, electronics, and so on), given that each platform and product category has its own distinctive characteristics and features [50]. Hence, future studies may be required to investigate other platforms and product classes.

It has been stated that cultural background exerts a greater influence on the perceptions and behaviors of customers when using social commerce technologies [153]. This

research was carried out using a sample of Iranian Instagram users involved in social commerce. Yet, the sample population's limitations on generalization might be mitigated in future studies by using samples from other nations and/or cultural contexts and performing a cross-cultural analysis. The results of this study highlighted the substantial value of influencer endorsements in the context of social commerce on social networking platforms. Therefore, we suggest conducting additional studies in this direction in order to determine the effectiveness of other influencer marketing strategies, such as influencer affiliate marketing, influencer marketing campaigns, and guest blogging. In addition, considering the fact that the mediating effects identified in this study have been categorized as complementary partial effects, it is important to acknowledge the potential existence of additional latent variables that may influence customers' purchasing behavior in the specific context of purchasing organic foods via the Instagram platform. This highlights the need for future research to explore these possibilities.

Lastly, this study adopted a cross-sectional design, implying that data were gathered at discrete points in time, thereby giving rise to concerns regarding the existence of cause-and-effect relationships. Further research may therefore utilize longitudinal and/or experimental methods.

References

1. Amiraslani, F.; Dragovich, D. Food-energy-water nexus in Iran over the last two centuries: A food secure future? *Energy Nexus* **2023**, *10*, 100189. [CrossRef]
2. Shirzad, H.; Barati, A.; Ehteshammajd, S.; Goli, I.; Siamian, N.; Moghaddam, S.M.; Pour, M.; Tan, R.; Janečková, K.; Sklenička, P.; et al. Agricultural land tenure system in Iran: An overview. *Land Use Policy* **2022**, *123*, 106375. [CrossRef]
3. Barati, A.; Azadi, H.; Movahhed Moghaddam, S.; Scheffran, J.; Dehghani Pour, M. Agricultural expansion and its impacts on climate change: Evidence from Iran. *Environ. Dev. Sustain.* **2023**, *26*, 5089–5115. [CrossRef]
4. Statista. Agriculture—Iran. 2023. Available online: https://www.statista.com/outlook/io/agriculture/iran (accessed on 24 January 2024).
5. TCCIMA. *Iran Agriculture Sector Guide*, 2nd ed.; Agriculture; Tehran Chamber of Commerce, Industries, Mines, and Agriculture (TCCIMA): Tehran, Iran, 2023; pp. 1–72.
6. ILO. *Employment in Agriculture (% of Total Employment) (Modeled ILO Estimate)—Iran, Islamic Rep.*; International Labour Organization: Geneva, Switzerland, 2021.
7. Najafabadi, M.M.; Mirzaei, A.; Laskookalayeh, S.S.; Azarm, H. An investigation of the relationship among economic growth, agricultural expansion and chemical pollution in Iran through decoupling index analysis. *Environ. Sci. Pollut. Res.* **2022**, *29*, 76101–76118. [CrossRef]
8. Savari, M.; Yazdanpanah, M.; Rouzaneh, D. Factors affecting the implementation of soil conservation practices among Iranian farmers. *Sci. Rep.* **2022**, *12*, 8396. [CrossRef]
9. Mohammadi, S.; Balouei, F.; Haji, K.; Khaledi Darvishan, A.; Karydas, C.G. Country-scale spatio-temporal monitoring of soil erosion in Iran using the G2 model. *Int. J. Digit. Earth* **2021**, *14*, 1019–1039. [CrossRef]
10. FAO. *Global Soil Partnership*; FAO: Rome, Italy, 2024.
11. Ali, A.A.; Al-Abbadi, A.M.; Jabbar, F.K.; Alzahrani, H.; Hamad, S. Predicting Soil Erosion Rate at Transboundary Sub-Watersheds in Ali Al-Gharbi, Southern Iraq, Using RUSLE-Based GIS Model. *Sustainability* **2023**, *15*, 1776. [CrossRef]

12. Clark, S. Organic Farming and Climate Change: The Need for Innovation. *Sustainability* **2020**, *12*, 7012. [CrossRef]

13. Niemiec, M.; Chowaniak, M.; Sikora, J.; Szeląg-Sikora, A.; Gródek-Szostak, Z.; Komorowska, M. Selected Properties of Soils for Long-Term Use in Organic Farming. *Sustainability* **2020**, *12*, 2509. [CrossRef]

14. Dan, I.S.; Jitea, I.M. Barriers and Levers in the Development of the Value Chain of Organic Vegetables in Romania. *Sustainability* **2023**, *15*, 12321. [CrossRef]

15. Bursić, V.; Vuković, G.; Cara, M.; Kostić, M.; Stojanović, T.; Petrović, A.; Puvača, N.; Marinković, D.; Konstantinović, B. Plant Protection Products Residues Assessment in the Organic and Conventional Agricultural Production. *Sustainability* **2021**, *13*, 1075. [CrossRef]

16. Pânzaru, R.L.; Firoiu, D.; Ionescu, G.H.; Ciobanu, A.; Medelete, D.M.; Pîrvu, R. Organic Agriculture in the Context of 2030 Agenda Implementation in European Union Countries. *Sustainability* **2023**, *15*, 10582. [CrossRef]

17. Gamage, A.; Gangahagedara, R.; Gamage, J.; Jayasinghe, N.; Kodikara, N.; Suraweera, P.; Merah, O. Role of organic farming for achieving sustainability in agriculture. *Farming Syst.* **2023**, *1*, 100005. [CrossRef]

18. Calabro, G.; Vieri, S. Limits and potential of organic farming towards a more sustainable European agri-food system. *Br. Food J.* **2024**, *126*, 223–236. [CrossRef]

19. Muhammad, D.R.A.; Zaman, M.Z.; Ariyantoro, A.R. Chapter 7—Sustainable materials and infrastructures for the food industry. In *Sustainable Development and Pathways for Food Ecosystems*; Accorsi, R., Bhat, R., Eds.; Academic Press: Cambridge, MA, USA, 2023; pp. 147–182.

20. IFOAM. *Organic Agriculture and Its Benefits for Climate and Biodiversity*; IFOAM: Bruxelles, Belgium, 2022; pp. 1–16.

21. Skinner, C.; Gattinger, A.; Krauss, M.; Krause, H.-M.; Mayer, J.; Van der Heijden, M.G.A.; Mäder, P. The impact of long-term organic farming on soil-derived greenhouse gas emissions. *Sci. Rep.* **2019**, *9*, 1702. [CrossRef] [PubMed]

22. Maleksaeidi, H.; Memarbashi, P. Barriers of environmentally-friendly entrepreneurship development in Iran's agriculture. *Environ. Dev.* **2023**, *46*, 100831. [CrossRef]

23. Li, R.; Lee, C.-H.; Lin, Y.-T.; Liu, C.-W. Chinese consumers' willingness to pay for organic foods: A conceptual review. *Int. Food Agribus. Manag. Rev.* **2020**, *23*, 173–188. [CrossRef]

24. Yilmaz, B. Factors Influencing Consumers' Behaviour towards Purchasing Organic Foods: A Theoretical Model. *Sustainability* **2023**, *15*, 14895. [CrossRef]

25. Bazhan, M.; Shafiei Sabet, F.; Borumandnia, N. Development and validation of a questionnaire to examine determinants of consumer intentions to purchase organic food. *BMC Nutr.* **2023**, *9*, 74. [CrossRef]

26. Yazdanpanah, M.; Tajeri Moghadam, M.; Javan, F.; Deghanpour, M.; Sieber, S.; Falsafi, P. How rationality, morality, and fear shape willingness to carry out organic crop cultivation: A case study of farmers in southwestern Iran. *Environ. Dev. Sustain.* **2022**, *24*, 2145–2163. [CrossRef]

27. Schlatter, B.; Trávníček, J.; Willer, H. *The World of Organic Agriculture Statistics and Emerging Trends 2023*, 3rd ed.; FiBL, IFOAM—Organics International: Frick, Switzerland, 2023; pp. 31–133.

28. Kheirollahi, H.; Taghizadeh, H. Prioritizing the factors affecting the promotion of customers' attitude towards organic food products by employing the technique of fuzzy AHP. *Int. J. Nonlinear Anal. Appl.* **2023**, *14*, 75–89. [CrossRef]

29. Tohidi, A.; Mousavi, S.; Dourandish, A.; Alizadeh, P. Organic food market segmentation based on the neobehavioristic theory of consumer behavior. *Br. Food J.* **2023**, *125*, 810–831. [CrossRef]

30. Babajani, A.; Muehlberger, S.; Feuerbacher, A.; Wieck, C. Drivers and challenges of large-scale conversion policies to organic and agro-chemical free agriculture in South Asia. *Int. J. Agric. Sustain.* **2023**, *21*, 2262372. [CrossRef]

31. Hagolani-Albov, S.E.; Ehrnström-Fuentes, M. The REKO model: Facebook as a platform for food system reconnection. *Int. J. Food Des.* **2023**, *8*, 61–87. [CrossRef]

32. Sezavar, A.N.M. Review of Importance of Utilizing Social Messengers (Telegram) and e-Commerce Advantages to Promote the Sale of Farming Companies in Iran. Master's Thesis, The Polytechnic University of Milan, Milan, Italy, 2020.

33. Lin, J.; Guo, J.; Turel, O.; Liu, S. Purchasing organic food with social commerce: An integrated food-technology consumption values perspective. *Int. J. Inf. Manag.* **2020**, *51*, 102033. [CrossRef]

34. Hajli, N.; Sims, J.; Zadeh, A.H.; Richard, M.-O. A social commerce investigation of the role of trust in a social networking site on purchase intentions. *J. Bus. Res.* **2017**, *71*, 133–141. [CrossRef]

35. Attar, R.W.; Almusharraf, A.; Alfawaz, A.; Hajli, N. New Trends in E-Commerce Research: Linking Social Commerce and Sharing Commerce: A Systematic Literature Review. *Sustainability* **2022**, *14*, 16024. [CrossRef]

36. Dincer, C.; Dincer, B. Social Commerce and Purchase Intention: A Brief Look at the Last Decade by Bibliometrics. *Sustainability* **2023**, *15*, 846. [CrossRef]

37. Marolt, M.; Zimmermann, H.-D.; Pucihar, A. Social Media Use and Business Performance in SMEs: The Mediating Roles of Relational Social Commerce Capability and Competitive Advantage. *Sustainability* **2022**, *14*, 15029. [CrossRef]

38. Chevalier, S. Social Commerce Revenue Worldwide from 2022 to 2030. 2023. Available online: https://www.statista.com/statistics/1231944/social-commerce-global-market-size/ (accessed on 29 December 2023).

39. Subriadi, A.P.; Kusuma Wardhani, S.A. Survivability Scenario of SMEs in Facing COVID-19 Crisis Based on the Social Commerce Framework. *Sustainability* **2022**, *14*, 3531. [CrossRef]

40. Sheikh, Z.; Ghaffar, A.; Islam, T.; Sheikh, A. Consumers' acceptance of social commerce during COVID-19 lockdown. *J. Glob. Sch. Mark. Sci. Bridg. Asia World* **2023**, *33*, 210–230. [CrossRef]

41. Elshaer, I.A.; Alrawad, M.; Lutfi, A.; Azazz, A.M.S. Social commerce and buying intention post COVID-19: Evidence from a hybrid approach based on SEM—fsQCA. *J. Retail. Consum. Serv.* **2024**, *76*, 103548. [CrossRef]

42. Bazi, S.; Attar, R.W.; Adam, N.A.; Hajli, N. Consumers' social self-identity drivers on social commerce platforms-based food and beverage. *Br. Food J.* **2023**, *125*, 3050–3068. [CrossRef]

43. Shiri, N. Attitude toward organic agribusiness: An approach to developing sustainable business. *Br. Food J.* **2021**, *123*, 3265–3276. [CrossRef]

44. Tariq, A.; Wang, C.; Tanveer, Y.; Akram, U.; Akram, Z. Organic food consumerism through social commerce in China. *Asia Pac. J. Mark. Logist.* **2019**, *31*, 202–222. [CrossRef]

45. Melovic, B.; Cirovic, D.; Dudic, B.; Vulic, T.B.; Gregus, M. The Analysis of Marketing Factors Influencing Consumers' Preferences and Acceptance of Organic Food Products—Recommendations for the Optimization of the Offer in a Developing Market. *Foods* **2020**, *9*, 259. [CrossRef]

46. Tajpour, M.; Hosseini, E.; Ratten, V.; Bahman-Zangi, B.; Soleymanian, S.M. The Role of Entrepreneurial Thinking Mediated by Social Media on the Sustainability of Small and Medium-Sized Enterprises in Iran. *Sustainability* **2023**, *15*, 4518. [CrossRef]

47. Techrasa. Market Report of Instagram Stores and Social Commerce Industry in Iran 1401. Report Number 1401. 2022. Available online: https://rb.gy/wifx5v (accessed on 17 April 2023).

48. Naseri, A.; Kayvanfar, V.; Sheikh, S.; Werner, F. Social Media's Role in Achieving Marketing Goals in Iran during the COVID-19 Pandemic. *Soc. Sci.* **2022**, *11*, 512. [CrossRef]

49. Herzallah, D.; Muñoz-Leiva, F.; Liébana-Cabanillas, F. Selling on Instagram: Factors that Determine the Adoption of Instagram Commerce. *Int. J. Hum.–Comput. Interact.* **2022**, *38*, 1004–1022. [CrossRef]

50. Ahmadi, I.; Waltenrath, A.; Janze, C. Congruency and Users' Sharing on Social Media Platforms: A Novel Approach for Analyzing Content. *J. Advert.* **2023**, *52*, 369–386. [CrossRef]

51. Venkatesh, V.; Thong, J.Y.L.; Xu, X. Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Q.* **2012**, *36*, 157–178. [CrossRef]

52. Zaid Kilani, A.A.-H.; Kakeesh, D.F.; Al-Weshah, G.A.; Al-Debei, M.M. Consumer post-adoption of e-wallet: An extended UTAUT2 perspective with trust. *J. Open Innov. Technol. Mark. Complex.* **2023**, *9*, 100113. [CrossRef]

53. Siyal, A.W.; Chen, H.; Jamal Shah, S.; Shahzad, F.; Bano, S. Customization at a glance: Investigating consumer experiences in mobile commerce applications. *J. Retail. Consum. Serv.* **2024**, *76*, 103602. [CrossRef]

54. Kurniawan, A.C.; Rachmawati, N.L.; Ayu, M.M.; Ong, A.K.S.; Redi, A.A.N.P. Determinants of satisfaction and continuance intention towards online food delivery service users in Indonesia post the COVID-19 pandemic. *Heliyon* **2024**, *10*, e23298. [CrossRef]

55. Nurkhin, A.; Mukhibad, H.; Daud, N.M. Determinants of halal food purchase decisions for Go Food and Shopee Food users. *Innov. Mark.* **2023**, *19*, 113–125. [CrossRef]

56. Patwa, N.; Gupta, M.; Mittal, A. Modeling the influence of online communities and social commerce. *Glob. Knowl. Mem. Commun.* 2024; *ahead-of-print*. [CrossRef]

57. Kavacik, M.; Çinar, K.; Zafer Kavacik, S. Visual Mapping of Social Commerce Articles on WoS Database Between 1995 and 2023. *SAGE Open* **2023**, *13*, 1–16. [CrossRef]

58. Roper, J. *The Rise of E-Commerce: From Dot to Dominance*, 1st ed.; Pen & Sword History: Barnsley, UK, 2023; p. 304.

59. Zhao, W.; Hu, F.; Wang, J.; Shu, T.; Xu, Y. A systematic literature review on social commerce: Assessing the past and guiding the future. *Electron. Commer. Res. Appl.* **2023**, *57*, 101219. [CrossRef]

60. Leong, L.-Y.; Hew, T.S.; Ooi, K.-B.; Hajli, N.; Tan, G.W.-H. Revisiting the social commerce paradigm: The social commerce (SC) framework and a research agenda. *Internet Res.* 2023; *ahead-of-print*. [CrossRef]

61. Dixon, S.J. Number of Social Media Users Worldwide from 2017 to 2027. 2023. Available online: https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/ (accessed on 24 January 2024).

62. Becdach, C.; Kubetz, Z.; Brodherson, M.; Nakajima, J.; Gersovitz, A.; Glaser, D.; Magni, M. *Social Commerce: The Future of How Consumers Interact with Brands*; McKinsey & Company: New York, NY, USA, 2022.

63. Nadeem, W.; Khani, A.H.; Schultz, C.D.; Adam, N.A.; Attar, R.W.; Hajli, N. How social presence drives commitment and loyalty with online brand communities? the role of social commerce trust. *J. Retail. Consum. Serv.* **2020**, *55*, 102136. [CrossRef]

64. Sharma, S.; Menard, P.; Mutchler, L.A. Who to Trust? Applying Trust to Social Commerce. *J. Comput. Inf. Syst.* **2019**, *59*, 32–42. [CrossRef]

65. Rahman, F.B.A.; Hanafiah, M.H.; Zahari, M.S.M.; Jipiu, L.B. Social commerce adoption: A study on consumer's online purchase behaviour of perishable pastry products. *Br. Food J.* **2023**, *125*, 318–344. [CrossRef]

66. Al-kfairy, M.; Shuhaiber, A.; Al-khatib, A.W.; Alrabaee, S.; Khaddaj, S. Understanding Trust Drivers of S-commerce. *Heliyon* **2024**, *10*, e23332. [CrossRef] [PubMed]

67. Dwidienawati, D.; Tjahjana, D.; Abdinagoro, S.B.; Gandasari, D. Customer review or influencer endorsement: Which one influences purchase intention more? *Heliyon* **2020**, *6*, e05543. [CrossRef] [PubMed]

68. Ye, G.; Hudders, L.; De Jans, S.; De Veirman, M. The Value of Influencer Marketing for Business: A Bibliometric Analysis and Managerial Implications. *J. Advert.* **2021**, *50*, 160–178. [CrossRef]

69. Shamim, K.; Azam, M.; Islam, T. How do social media influencers induce the urge to buy impulsively? Social commerce context. *J. Retail. Consum. Serv.* **2024**, *77*, 103621. [CrossRef]

70. Chetioui, Y.; Butt, I.; Fathani, A.; Lebdaoui, H. Organic food and Instagram health and wellbeing influencers: An emerging country's perspective with gender as a moderator. *Br. Food J.* **2023**, *125*, 1181–1205. [CrossRef]

71. Venciute, D.; Kazukauskaite, M.; Correia, R.F.; Kuslys, M.; Vaiciukynas, E. The effect of cause-related marketing on the green consumption attitude–behaviour gap in the cosmetics industry. *J. Contemp. Mark. Sci.* **2023**, *6*, 22–45. [CrossRef]

72. Tawde, S.; Kamath, R.; ShabbirHusain, R.V. 'Mind will not mind'—Decoding consumers' green intention-green purchase behavior gap via moderated mediation effects of implementation intentions and self-efficacy. *J. Clean. Prod.* **2023**, *383*, 135506. [CrossRef]

73. Lim, W.M.; Weissmann, M.A. Toward a theory of behavioral control. *J. Strateg. Mark.* **2023**, *31*, 185–211. [CrossRef]

74. Chaudhuri, N.; Gupta, G.; Vamsi, V.; Bose, I. On the platform but will they buy? Predicting customers' purchase behavior using deep learning. *Decis. Support Syst.* **2021**, *149*, 113622. [CrossRef]

75. Nguyen, N.M.H.; Borusiak, B. Using UTAUT2 model to examine the determinants of omnichannel technology acceptance by consumers. *Logforum* **2021**, *17*, 231–241. [CrossRef]

76. Chen, L.; Rashidin, M.S.; Song, F.; Wang, Y.; Javed, S.; Wang, J. Determinants of Consumer's Purchase Intention on Fresh E-Commerce Platform: Perspective of UTAUT Model. *SAGE Open* **2021**, *11*, 1–17. [CrossRef]

77. Zhang, M.; Hassan, H.; Migin, M.W. Exploring the Consumers' Purchase Intention on Online Community Group Buying Platform during Pandemic. *Sustainability* **2023**, *15*, 2433. [CrossRef]

78. Mensah, I.K.; Zeng, G.; Luo, C. Determinants of Social Commerce Purchase and Recommendation Intentions Within the Context of Swift Guanxi Among Chinese College Students. *SAGE Open* **2023**, *13*, 1–20. [CrossRef]

79. Kim, S.S. Purchase Intention in the Online Open Market: Do Concerns for E-Commerce Really Matter? *Sustainability* **2020**, *12*, 773. [CrossRef]

80. El-Ebiary, Y.A.B.; Pathmanathan, P.R.; Tarshany, Y.M.A.; Jusoh, J.A.; Aseh, K.; Al Moaiad, Y.; Al-Kofahi, M.; Pande, B.; Bamansoor, S. Determinants of Customer Purchase Intention Using Zalora Mobile Commerce Application. In Proceedings of the 2021 2nd International Conference on Smart Computing and Electronic Enterprise (ICSCEE), Cameron Highlands, Malaysia, 15–17 June 2021; pp. 159–163.

81. Gharaibeh, M.K.; Arshad, M.R.M.; Gharaibh, N.K. Using the UTAUT2 model to determine factors affecting adoption of mobile banking services: A qualitative approach. *Int. J. Interact. Mob. Technol.* **2018**, *12*, 123–134. [CrossRef]

82. Shoheib, Z.; Abu-Shanab, E.A. Adapting the UTAUT2 Model for Social Commerce Context. *Int. J. E-Bus. Res.* **2022**, *18*, 1–20. [CrossRef]

83. Andijani, A.; Kang, K. Social Commerce Acceptance after Post COVID-19 Pandemic in Saudi Women Customers: A Multi-Group Analysis of Customer Age. *Sustainability* **2022**, *14*, 10213. [CrossRef]

84. Gvili, Y.; Levy, S. I Share, Therefore I Trust: A moderated mediation model of the influence of eWOM engagement on social commerce. *J. Bus. Res.* **2023**, *166*, 114131. [CrossRef]

85. Han, M.C. Checkout button and online consumer impulse-buying behavior in social commerce: A trust transfer perspective. *J. Retail. Consum. Serv.* **2023**, *74*, 103431. [CrossRef]

86. Hong, C.; Choi, E.-K.; Joung, H.-W. Determinants of customer purchase intention toward online food delivery services: The moderating role of usage frequency. *J. Hosp. Tour. Manag.* **2023**, *54*, 76–87. [CrossRef]

87. Inzaghi, N.; Sukmaningsih, D.W. Factors Affecting Purchase Intention In Social Commerce. In Proceedings of the 2022 5th International Seminar on Research of Information Technology and Intelligent Systems (ISRITI), Yogyakarta, Indonesia, 8–9 December 2022; pp. 434–439.

88. Maulida, M.; Sari, Y.; Rohmah, S. Influence of Electronic Word Of Mouth (e-WOM), Hedonic Motivation, and Price Value On Consumer's Purchase Intention Using Social Commerce "TikTok Shop". In Proceedings of the 2022 Seventh International Conference on Informatics and Computing (ICIC), Denpasar, Bali, Indonesia, 8–9 December 2022; pp. 1–7.

89. Hofstede, G. Dimensionalizing Cultures: The Hofstede Model in Context. *Online Read. Psychol. Cult.* **2011**, *2*, 1–26. [CrossRef]

90. Evason, N. Iranian Culture. 2016. Available online: https://culturalatlas.sbs.com.au/iranian-culture/iranian-culture-family (accessed on 24 January 2024).

91. Li, C.-Y. How social commerce constructs influence customers' social shopping intention? An empirical study of a social commerce website. *Technol. Forecast. Soc. Chang.* **2019**, *144*, 282–294. [CrossRef]

92. Gvili, Y.; Levy, S. Consumer engagement in sharing brand-related information on social commerce: The roles of culture and experience. *J. Mark. Commun.* **2021**, *27*, 53–68. [CrossRef]

93. Goraya, M.A.S.; Jing, Z.; Shareef, M.A.; Imran, M.; Malik, A.; Akram, M.S. An investigation of the drivers of social commerce and e-word-of-mouth intentions: Elucidating the role of social commerce in E-business. *Electron. Mark.* **2021**, *31*, 181–195. [CrossRef]

94. Ao, L.; Bansal, R.; Pruthi, N.; Khaskheli, M.B. Impact of Social Media Influencers on Customer Engagement and Purchase Intention: A Meta-Analysis. *Sustainability* **2023**, *15*, 2744. [CrossRef]

95. Rayasam, L.S.; Khattri, V. Social Media Influencer Endorsement: How Attitude towards Endorsement Affects Brand Attitude. *Int. J. Online Mark.* **2022**, *12*, 1–14. [CrossRef]

96. Glenister, G. *Influencer Marketing Strategy: How to Create Successful Influencer Marketing*, 2nd ed.; Kogan Page: UK, 2024; p. 320.

97. Ingrassia, M.; Bellia, C.; Giurdanella, C.; Columba, P.; Chironi, S. Digital Influencers, Food and Tourism—A New Model of Open Innovation for Businesses in the Ho.Re.Ca. Sector. *J. Open Innov. Technol. Mark. Complex.* **2022**, *8*, 1–29. [CrossRef]

98. Hu, H.; Zhang, D.; Wang, C. Impact of social media influencers' endorsement on application adoption: A trust transfer perspective. *Soc. Behav. Personal. Int. J.* **2019**, *47*, 1–12. [CrossRef]

99. Stelzner, M.A. *Social Media Marketing Industry Report*; Social Media Examiner: Poway, CA, USA, 2023; pp. 26–37.
100. Fakhreddin, F.; Foroudi, P. Instagram Influencers: The Role of Opinion Leadership in Consumers' Purchase Behavior. *J. Promot. Manag.* **2022**, *28*, 795–825. [CrossRef]
101. Zhou, W.; Dong, J.; Zhang, W. The impact of interpersonal interaction factors on consumers' purchase intention in social commerce: A relationship quality perspective. *Ind. Manag. Data Syst.* **2023**, *123*, 697–721. [CrossRef]
102. Sun, X.; Pelet, J.-É.; Dai, S.; Ma, Y. The Effects of Trust, Perceived Risk, Innovativeness, and Deal Proneness on Consumers' Purchasing Behavior in the Livestreaming Social Commerce Context. *Sustainability* **2023**, *15*, 16320. [CrossRef]
103. Kim, J.; He, N.; Miles, I. Live Commerce Platforms: A New Paradigm for E-Commerce Platform Economy. *J. Theor. Appl. Electron. Commer. Res.* **2023**, *18*, 959–975. [CrossRef]
104. Lee, Y.-C.; Nguyen, M.N.; Yang, Q. Factors Influencing Vietnamese Generation MZ's Adoption of Metaverse Platforms. *Sustainability* **2023**, *15*, 4940. [CrossRef]
105. Adams, W.C. Conducting Semi-Structured Interviews. In *Handbook of Practical Program Evaluation*; Wiley: Hoboken, NJ, USA, 2015; pp. 492–505.
106. Agresti, A. *Categorical Data Analysis*, 3rd ed.; Wiley: Hoboken, NJ, USA, 2012; p. 752.
107. Creswell, J.W. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 6th ed.; Sage Publications, Inc.: Thousand Oaks, CA, USA, 2022; p. 320.
108. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 3rd ed.; SAGE Publications: Thousand Oaks, CA, USA, 2021; p. 384.
109. Gefen, D.; Rigdon, E.E.; Straub, D. An Update and Extension to SEM Guidelines for Administrative and Social Science Research. *MIS Q.* **2011**, *35*, 3–14. [CrossRef]
110. Reinartz, W.; Haenlein, M.; Henseler, J. An empirical comparison of the efficacy of covariance-based and variance-based SEM. *Int. J. Res. Mark.* **2009**, *26*, 332–344. [CrossRef]
111. Eutsler, J.; Lang, B. Rating Scales in Accounting Research: The Impact of Scale Points and Labels. *Behav. Res. Account.* **2015**, *27*, 35–51. [CrossRef]
112. Alotaibi, T.S.; Alkhathlan, A.A.; Saad Alzeer, S. Instagram Shopping in Saudi Arabia: What Influences Consumer Trust and Purchase Decisions? *Int. J. Adv. Comput. Sci. Appl.* **2019**, *10*, 606–613. [CrossRef]
113. Saffanah, L.; Handayani, P.W.; Sunarso, F.P. Actual purchases on Instagram Live Shopping: The influence of live shopping engagement and information technology affordance. *Asia Pac. Manag. Rev.* **2023**, *28*, 204–214. [CrossRef]
114. Hair Jr., J.; Page, M.; Brunsveld, N.; Merkle, A.; Cleton, N. *Essentials of Business Research Methods*, 5th ed.; Routledge: New York, NY, USA, 2023; p. 528.
115. Podsakoff, P.M.; MacKenzie, S.B.; Podsakoff, N.P. Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annu. Rev. Psychol.* **2012**, *63*, 539–569. [CrossRef]
116. Chin, W.W. Commentary: Issues and Opinion on Structural Equation Modeling. *MIS Q.* **1998**, *22*, vii–xvi.
117. DeVellis, R.F. *Scale Development: Theory and Applications*; Sage Publications, Inc: Thousand Oaks, CA, USA, 1991; p. 121.
118. Fornell, C.; Larcker, D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
119. Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [CrossRef]
120. Kline, R.B. *Principles and Practice of Structural Equation Modeling*, 5th ed.; Guilford Press: New York, NY, USA, 2023; p. 494.
121. Latan, H.; Noonan, R. *Basic Concepts, Methodological Issues and Applications*, 1st ed.; Springer: Cham, Switzerland, 2017; p. 414.
122. Cohen, J. A power primer. *Psychol. Bull.* **1992**, *112*, 155–159. [CrossRef]
123. Carrión, G.C.; Nitzl, C.; Roldán, J.L. Mediation Analyses in Partial Least Squares Structural Equation Modeling: Guidelines and Empirical Examples. In *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications*, 1st ed.; Latan, H., Noonan, R., Eds.; Partial Least Squares Path Modeling; Springer International Publishing: Cham, Switzerland, 2017; pp. 173–195.
124. Preacher, K.J.; Hayes, A.F. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav. Res. Methods* **2008**, *40*, 879–891. [CrossRef]
125. Marikyan, D.; Papagiannidis, S. *Unified Theory of Acceptance and Use of Technology: A Review.*; Papagiannidis, S., Ed.; TheoryHub: Newcastle upon Tyne, UK, 2022; p. 219.
126. Sadaoui, M. *Electronic Commerce: Consumers' Perception of Mobile Social Commerce in Sweden*; Linnaeus University: Växjö, Sweden, 2020.
127. Lebrument, N.; Zumbo-Lebrument, C.; Rochette, C. Acceptance of MaaS mobile applications: An application of UTAUT2 in the context of French smart cities. *Inf. Syst. Manag.* **2022**, *26*, 19–54. [CrossRef]
128. Liébana-Cabanillas, F.; Corral-Hermoso, J.A.; Villarejo-Ramos, Á.F.; Higueras-Castillo, E. New social consumer? Determining factors of Facebook commerce. *J. Decis. Syst.* **2018**, *27*, 213–237. [CrossRef]
129. Nedra, B.-A.; Hadhri, W.; Mezrani, M. Determinants of customers' intentions to use hedonic networks: The case of Instagram. *J. Retail. Consum. Serv.* **2019**, *46*, 21–32. [CrossRef]
130. Akgül, Y.; Yaman Selçi, B.; Geçgil, G.; Yavuz, G. The Influencing Factors for Purchasing Intentions in Social Media by Utaut Perspective. In *Structural Equation Modeling Approaches to E-Service Adoption*; IGI Global: Hershey, PA, USA, 2019; pp. 254–267.

131. Rahman, A.; Fauzia, R.N.; Pamungkas, S. Factors Influencing Use of Social Commerce: An Empirical Study from Indonesia. *J. Asian Financ. Econ. Bus.* **2020**, *7*, 711–720. [CrossRef]

132. Cutshall, R.; Changchit, C.; Pham, H.; Pham, D. Determinants of Social Commerce Adoption: An Empirical Study of Vietnamese Consumers. *J. Internet Commer.* **2022**, *21*, 133–159. [CrossRef]

133. Shoheib, Z.; Abu-Shanab, E.A. Factors influencing consumer intention to use social commerce. *Int. J. Electron. Mark. Retail.* **2022**, *14*, 61–86. [CrossRef]

134. Statcounter. Social Media Stats Islamic Republic of Iran. October 2022–October 2023. 2023. Available online: https://gs.statcounter.com/social-media-stats/all/iran (accessed on 24 December 2023).

135. Shirkhodaie, M.; Fallah Lajimi, H.; Adabi Firoozjaei, A.; Khanjanzadeh Kakeroodi, N.; Nejat, S. Instagram Marketing: Choosing an Influencer for the Food Industry based on the Full Consistency Method (FUCOM). *J. Bus. Manag.* **2022**, *14*, 495–518. [CrossRef]

136. Riaz, M.U.; Guang, L.X.; Zafar, M.; Shahzad, F.; Shahbaz, M.; Lateef, M. Consumers' purchase intention and decision-making process through social networking sites: A social commerce construct. *Behav. Inf. Technol.* **2021**, *40*, 99–115. [CrossRef]

137. Cheng, L.-C.; Wu, Y.T.; Chao, C.-T.; Wang, J.-H. Detecting fake reviewers from the social context with a graph neural network method. *Decis. Support Syst.* **2024**, *179*, 114150. [CrossRef]

138. Song, Y.; Wang, L.; Zhang, Z.; Hikkerova, L. Do fake reviews promote consumers' purchase intention? *J. Bus. Res.* **2023**, *164*, 113971. [CrossRef]

139. Zhao, L.; Xu, Y.; Xu, X. The effects of trust and platform innovation characteristics on consumer behaviors in social commerce: A social influence perspective. *Electron. Commer. Res. Appl.* **2023**, *60*, 101284. [CrossRef]

140. Liu, C.; Bao, Z.; Zheng, C. Exploring consumers' purchase intention in social commerce. *Asia Pac. J. Mark. Logist.* **2019**, *31*, 378–397. [CrossRef]

141. Mutambik, I.; Lee, J.; Almuqrin, A.; Zhang, J.Z.; Homadi, A. The Growth of Social Commerce: How It Is Affected by Users' Privacy Concerns. *J. Theor. Appl. Electron. Commer. Res.* **2023**, *18*, 725–743. [CrossRef]

142. Vatanasakdakul, S.; Aoun, C.; Defiandry, F. Social Commerce Adoption: A Consumer's Perspective to an Emergent Frontier. *Hum. Behav. Emerg. Technol.* **2023**, *2023*, 3239491. [CrossRef]

143. Axcell, S.; Ellis, D. Exploring the attitudes and behaviour of Gen Z students towards branded mobile apps in an emerging market: UTAUT2 model extension. *Young Consum.* **2023**, *24*, 184–202. [CrossRef]

144. Tarhini, A.; Alalwan, A.A.; Algharabat, R.S. Factors influencing the adoption of online shopping in Lebanon: An empirical integration of unified theory of acceptance and use of technology2 and DeLone-McLean model of IS success. *Int. J. Electron. Mark. Retail.* **2019**, *10*, 368–388. [CrossRef]

145. Negm, E.M. Consumers' acceptance intentions regarding e-payments: A focus on the extended unified theory of acceptance and use of technology (UTAUT2). *Manag. Sustain. Arab Rev.* **2023**; *ahead-of-print*. [CrossRef]

146. Ibrahim, B.; Aljarah, A. The era of Instagram expansion: Matching social media marketing activities and brand loyalty through customer relationship quality. *J. Mark. Commun.* **2023**, *29*, 1–25. [CrossRef]

147. Thi Nguyen, N.P.; Dang, H.D. Organic food purchase decisions from a context-based behavioral reasoning approach. *Appetite* **2022**, *173*, 105975. [CrossRef]

148. Ali, H.; Li, M.; Hao, Y. Purchasing Behavior of Organic Food among Chinese University Students. *Sustainability* **2021**, *13*, 5464. [CrossRef]

149. John, A.; Pujari, V.; Majumdar, S. Impact of social media marketing on purchasing intentions of luxury brands: The case of millennial consumers in the UAE. *Int. J. Electron. Mark. Retail.* **2023**, *14*, 275–293. [CrossRef]

150. Azzurra, A.; Massimiliano, A.; Angela, M. Measuring sustainable food consumption: A case study on organic food. *Sustain. Prod. Consum.* **2019**, *17*, 95–107. [CrossRef]

151. Chiriacò, M.V.; Castaldi, S.; Valentini, R. Determining organic versus conventional food emissions to foster the transition to sustainable food systems and diets: Insights from a systematic review. *J. Clean. Prod.* **2022**, *380*, 134937. [CrossRef]

152. UN. *The Sustainable Development Goals Report 2023*; 23-09739; The United Nations (UN): New York, NY, USA, 2023.

153. Yin, X.; Wang, H.; Xia, Q.; Gu, Q. How Social Interaction Affects Purchase Intention in Social Commerce: A Cultural Perspective. *Sustainability* **2019**, *11*, 2423. [CrossRef]