



Article

Investigating the Impact of Situational Influences and Social Support on Social Commerce during the COVID-19 Pandemic

Saleh Bazi ^{1,*} , Hadeel Haddad ¹, Amjad Al-Amad ¹ , Daniel Rees ² and Nick Hajli ²

¹ Department of Marketing, Faculty of Economics and Administrative Sciences, Yarmouk University, Irbid 21163, Jordan; hadeel.haddad@yu.edu.jo (H.H.); amjad.alamad@yu.edu.jo (A.A.-A.)

² Swansea i-Lab (Innovation Lab), School of Management, Bay Campus, Swansea University, Swansea SA1 8EN, UK; d.j.rees@swansea.ac.uk (D.R.); nick.hajli@swansea.ac.uk (N.H.)

* Correspondence: saleh.bazi@yu.edu.jo

Abstract: Without question, 2020 was an unprecedented period for all businesses and consumers in the world, especially for social commerce businesses. Growing online shopping during the pandemic has proliferated the appetite of social commerce websites. Drawing on the situational influences' theory and social support theory, the purpose of this study was to investigate the impact of situational influences during the COVID-19 pandemic on online purchase intention across the big five personality traits. The data were collected via online survey. The sample consisted of 349 social commerce website users in the UK. The model was tested using Partial Least Squares-Structured Equation Modelling (PLS-SEM). The results showed the different cohorts of buying intention on social commerce websites. Social support does not impact online purchase intention, while other situational factors do. Moreover, the model varied across the big five personality traits. The study substantially contributes to social commerce by investigating the social support and situational influences across different types of personality traits on online purchase intention during the pandemic.

Keywords: COVID-19 pandemic; personality traits; situational; influences; social commerce; social support



Citation: Bazi, S.; Haddad, H.; Al-Amad, A.; Rees, D.; Hajli, N. Investigating the Impact of Situational Influences and Social Support on Social Commerce during the COVID-19 Pandemic. *J. Theor. Appl. Electron. Commer. Res.* **2022**, *17*, 104–121. <https://doi.org/10.3390/jtaer17010006>

Academic Editors:
Eduardo Álvarez-Miranda and
Farid Shirazi

Received: 4 October 2021
Accepted: 1 December 2021
Published: 2 January 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Indeed, 2020 was an unprecedented year for the whole world. Since the outbreak of Coronavirus in December 2019 (“COVID-19” hereafter) and its associated disease, a global pandemic began in early 2020 and is still evolving around the globe. In January 2020, the virus was reported in Europe and subsequently spread around the European countries, including the UK. As of May 2021, there were 159 million global cases and 3,306,039 global deaths, approximately 4% in the UK [1]. The pandemic caused a tremulous shift in people’s lives, works, jobs, and activities. National new policies have been launched, such as social distancing, travel restrictions, lockdowns, and mask and glove wearing, and staying at home when going outside is unnecessary [2–4].

With the fatality and contagion rates continuing to rise and with the curve of infection rates not seriously flattened, markets, businesses, and consumers’ activities were badly disturbed. Though the COVID-19 pandemic has tremendously shifted organizations to digital business operations, its impacts on consumer behavior have received little consideration [5]. The threat of the pandemic has remarkably taken consumers to e-commerce websites [6]. According to a recent survey by McKinsey & Company, UK consumers intended to spend 30% to 49% more on groceries and necessities via digital channels, that is, 30% growth on food and groceries and less on apparel, household, entertainment, services, and travel and transportation products [6]. The COVID-19 pandemic introduced a new type of buying called “Pandemic buying” that causes “scarcity and distress” [7], and, despite the accelerated shift in e-commerce sales, only little has been written on how consumers are faring

with online purchasing in both context and circumstance settings [8], particularly on social commerce platforms.

Social commerce is the augmentation of e-commerce. Social commerce has impacted power relations in businesses, handing the power from sellers over to buyers, who can co-create the value of the brand [9]. Several researchers examined several theories on social commerce. Some of the most studied include social interaction, social support, social capital, social influence, and social desire [10–14]. Others include purchase decision making [15,16], trust [17,18], and technology-related factors, such as, perceived usefulness and security concern [19] and information quality [20]. To the best of the authors' knowledge, little has been written on the impact of situational influences on social commerce purchase intention, either before or during the pandemic. Entertainment is one of major industries that has been affected by the pandemic. Consumers have changed their entertainment behavior into social networks' platforms [21]. The authors argue that the above-mentioned studies did not investigate the effect of situational influences on social commerce consumers' online purchase intentions, also overlooking social support, a significant driver behind the success of social commerce. Moreover, consumers vary in their shopping behavior according to their personalities, while the role of personality traits are still vague and unpretentious in social commerce buying intention [22]. A study showed that the COVID-19 pandemic has increased the online purchasing behavior impacted by the consumer's ability to make purchasing decisions more quickly, the level of consumer awareness, consumer experience, and level of permanence of shopping behavior [23]. Moreover, to strengthen and extrapolate the research, the model provided was tested across the big five personality traits, which may help in providing a bigger picture of the situational influences, practically during the COVID-19 pandemic. To achieve these purposes, this research tried to find answers to the following research questions (RQs):

RQ1: How does social support influence online purchase intention during the COVID-19 pandemic?

RQ2: How do the situational influences influence online purchase intention during the COVID-19 pandemic?

RQ3: How do social support and situational influences vary among different personality traits during the COVID-19 pandemic?

The following section reviews the relevant literature and frames the hypotheses of situational influences and social support and illustrates the big five personality traits. The research methods, data collection and analysis, and outcomes are discussed in Section 3. Section 4 introduces the discussion of data and contributions of the study. Section 5 identifies limitations and future recommendations.

2. Theoretical Background and Hypotheses' Development

2.1. Situational Influences

According to Belk [24], situational influences are "all those factors particular to a time and place of observation which do not follow from a knowledge of personal and stimulus attributes and which have a demonstrable and systematic effect on current behavior". He classified them into five types: first, the physical surrounding, i.e., the geographical and institutional place, weather, interior decoration, and internal surrounding, such as "sounds, aromas, lighting, weather, and visible configurations of merchandise or other material surrounding" that stimulate people; second, the social surroundings that describe the presence of others, "their characteristics, their apparent roles, and interpersonal interactions"; third, the temporal perspective, that is, the time of day and season of the year, which could also be measured relative to a past or future event; fourth, the task definition, a situation that includes an intent or requirement to expose, shop, or seek knowledge about a general or specific product; finally, antecedent states, which includes "momentary moods or conditions of buying, such as anxiety, pleasantness, hostility, excitement, and illness" [24].

Previous studies that focused on the effect of situational influences on online buying were limited compared to those that studied the effect of the latter on offline or traditional

buying. Moreover, literature on the impact of situational influences on online buying during the pandemic is scarce. Thus, this paper investigates the effect of situational influences, convenience, and mood on online buying during the COVID-19 pandemic. Convenience, as a physical surrounding factor, and mood, as an antecedent state factor, seem to be relevant indicators of consumers' buying intentions during the COVID-19 pandemic. This is because when COVID-19 cases have increased and, as a result, social distancing, online shopping, and home delivery have become the norm, some consumers' practices have changed [25]. Consumers who have a problem travelling from a place to another due to the large geographical distance or health issues, such as illness, find online buying a convenient alternative [26]. Thus, this study adopted the convenience type developed by Jiang et al. [27], that is, "access convenience", where online consumers can shop any time from any location and spend less time and effort to avoid unfavorable crowds. In their study about consumers' perception of online shopping convenience, Jiang, Yang, and Jun [27] found that access convenience is the first driver of overall online shopping convenience. Nowadays, most retailers serve their customers through a click-and-mortar mode of business, and, since the outbreak of COVID-19, many retailers have started to serve consumers at their homes to keep them safe [28].

On the other hand, consumers' moods are expected to have an influence on consumers' online buying during the pandemic as most people experienced psychological pressure. Buying has a mood-lifting function for consumers [29]. According to Zhuang et al. [30], consumers' moods affect their purchasing behavior (happy consumers tend to buy more than unhappy consumers), whereas Lee and Lee [31] noted that consumers' negative moods could be relieved by indulging in shopping and consumers who shop online are more indulgent than those who shop offline, for they avoid crowds and interruptions caused by others. They also found that both positive and negative moods have a positive effect on consumers' attitudes towards online shopping. Given the new regulations and restrictions during the COVID-19 pandemic, and based on these arguments, the following hypotheses were proposed:

Hypothesis 1 (H1). *Convenience has a positive significant influence on consumers' online buying intentions during the COVID-19 pandemic.*

Hypothesis 2 (H2). *Positive mood has a positive significant influence on consumers' online buying intentions during the COVID-19 pandemic.*

Hypothesis 3 (H3). *Negative mood has a positive significant influence on consumers' online buying intentions during the COVID-19 pandemic.*

2.2. Social Support

Social support is defined as "the social resources that persons perceive to be available, or that are actually provided to them by non-professionals in the context of both formal support groups and informal helping relationships" [32]. The literature indicates that social support is a multifaceted concept including several types of support, such as "informational support, emotional support, instrumental support, and companionship", e.g., [33,34]. Exchanging social support in social commerce might be realized through non/verbal communications [35] via content. In social commerce, user behavior is driven by two formats of social support: informational and emotional support [36]. Particularly, informational support is reflected by product ratings and reviews, product recommendations, and shopping experiences to resolve problems based on user-generated content. Emotional support relates to psychosocial support such as the extent of care, assistance, and degree of comfort being exchanged seeking problem solutions [37].

Social commerce users are willing to share their buying experiences and are more inclined to learn from the experiences of others [38]. The reasons behind this are to seek information appropriately and engage with other users regardless of their cultural, geographic, and organizational background [39]. Social support has a greater effect on online

rather than offline settings [40]. Customers seek two types of social support: informational and emotional supports [41]. Social support strengthens bonds between members of the group [42] and endows them with the emotional attention and informational help [42,43] that exist in the social commerce communities [44]. Social interaction in social media communities aids purchase decisions and enhances product involvement [45]. For instance, it was found that consumers are willing to try mobile food applications from their friends and colleagues [46]. Reviews provided in third-party websites increases the likelihood of purchasing [47]. Social support in its two dimensions, informational and emotional, builds trust in social commerce websites [48,49]. Under the new regulations of social distancing, people are predisposed to apply social distancing when their close people do [50]. Consumers, during the COVID-19 pandemic, under the pressure of the lockdown where physical social interaction is limited and risky, would seek more social support when they purchase online. Therefore, we hypothesized the following:

Hypothesis 4 (H4). *Social support has a positive influence on consumers' online buying intentions during the COVID-19 pandemic.*

2.3. The Big Five Personality Traits

Personality refers to “psychological qualities that contribute to an individual’s enduring and distinctive patterns of feeling, thinking, and behaving” [51]. A number of studies view the dimensions of personality, the widely and comprehensive accepted model, as based on the big five traits’ theory of Costa Jr. and McCrae [52], which describes five traits of personality: (1) extraversion, (2) neuroticism, (3) agreeableness, (4) conscientiousness, and (5) openness to experience. According to this framework, the five dimensions include attributes behind each personality trait. The big five personality traits’ model has been widely validated in various domains and across different cultures [53–57].

Extraversion refers to a personality trait as being concentrated on the outside world and people who like to socialize and connect with others. These people are thought of as assertive and kind and liking positive emotions [57]. Neuroticism reflects a trait that is edgy and emotional instable and feels low self-esteem and despair [58]. Agreeableness people are characterized as friendly, compassionate, generous, and benevolent [59]. People who are described as conscientiousness are well-organized, self-disciplined, and act dutifully [60]. Finally, openness to experience relates to people who are imaginative, liberal, creative, and seek novel experiences [61].

2.4. Online Purchase Intention

Online purchase intentions refer to the customer’s behavioral intention to conduct purchasing transactions online [62]. Arguably, and similar to offline purchase intentions (i.e., intentions to purchase at conventional stores), the occurrence and the strength of online purchase intention can be influenced by a variety of situational factors, such as time [63], virtual surroundings (i.e., e-commerce sites) [64], parasocial interactions [65], mood [29,66], and, most recently, pandemic situations, which are comprised of lockdowns and psychological pressures [67].

Moreover, concerning social influences, research has shown that social support in the form of interactions between social commerce websites’ users is positively associated with online purchase intentions [68–70]. Similarly, but mediated by an e-commerce website’s dependency, researchers Bianchi et al. [71] found that this positive association holds true in a cross-cultural context. To date, iteratively, there is a dearth of research that has examined the impact of social support and mood on consumers’ online purchase intentions during the COVID-19 pandemic. Figure 1 illustrates the research model.

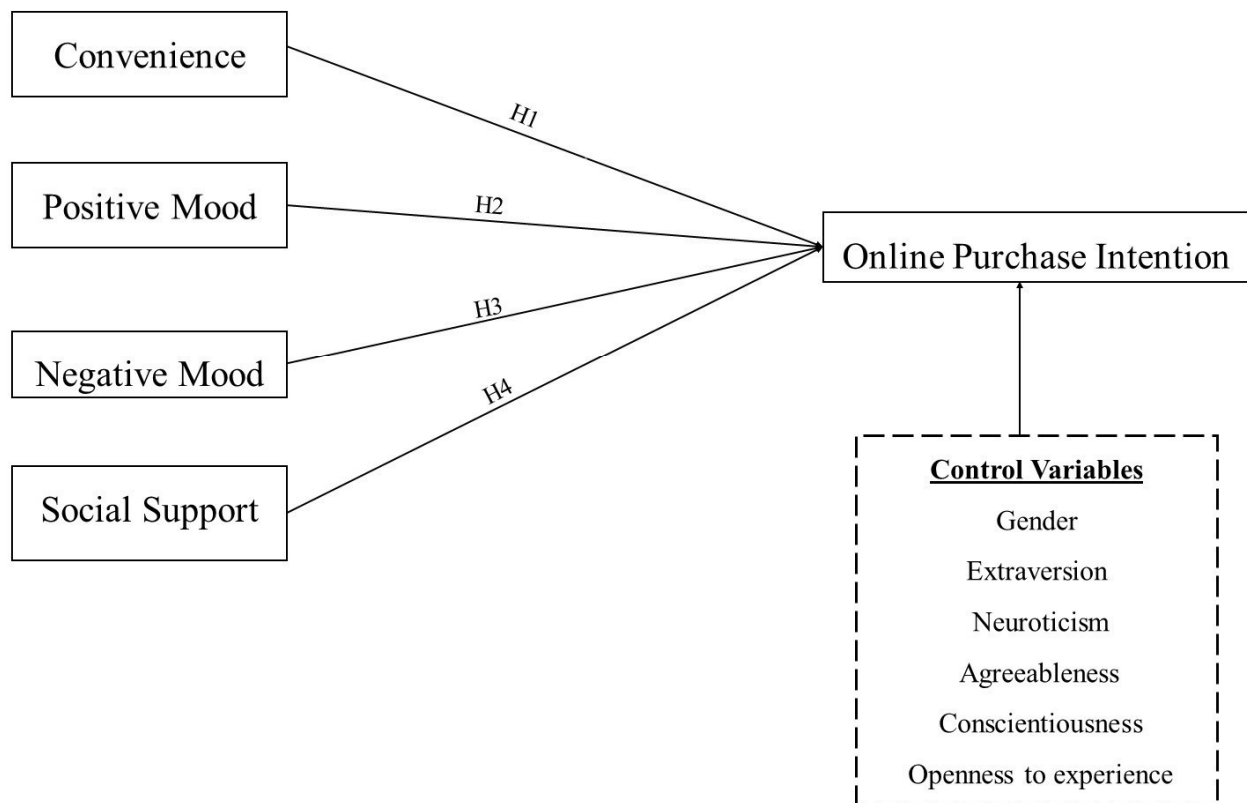


Figure 1. Research model.

3. Research Methodology

3.1. Research Setting

To test the research model in Figure 1, this research setting involved participants who used social commerce websites in the last 6 months and adopted a cross-sectional web survey. The sample population was British consumers. Data were gathered in December 2020 during the strict lockdown in the UK. Data were from users who had experience with social commerce website(s) in the last 6 months across different products. Data were collected via an online consumer panel data (www.prolific.ac, accessed on 1 December 2021). In the Prolific database, we targeted consumers who had been using social commerce platforms such as Amazon, eBay, Groupon, Facebook marketplace, Pinterest, TripAdvisor, Yelp, and Rotten Tomatoes. The proposed population size was 2523 potential participants. Before running the main data collection, a pilot study was employed to test the wording and structure of the survey; a few questions were amended according to the pilot test results.

We executed means power analysis to predict the minimal number of required participants to perform the structural equation modeling evaluation by G* Power software [72]. With four predictors, an alpha level of 5%, and a power of 8%, the minimum required sample size was 55. A sum of 403 responses was received, representing 16% of the total sample (2523). However, seven were excluded due to insufficient filling time, one was removed because of the inappropriate social commerce platform, and 46 had more than 15% of missing values among the scales and they, therefore, were removed from the data analysis [73]. In total, 349 responses were included in the analysis (see Table 1, which details the sample profile).

Table 1. Sample Characteristics.

Variable	Frequency	Percent
Gender		
Female	218	62.6
Male	129	37.1
Prefer not to say	1	0.30
Missing	1	0.30
Age Group		
18–24	19	5.5
25–35	89	25.6
36–45	110	31.6
46–64	117	33.6
Over 64	13	3.7
Missing	1	0.3
Level of Education		
High School	22	6.3
Collage	94	27.0
Undergraduate	137	39.4
Postgraduate	79	22.7
PhD	14	4.0
Other	2	0.60
Missing	1	0.3
Level of Income		
Less than £10,000	10	2.9
£10,000–£19,999	42	12.1
\$20,000–£29,999	64	18.4
£30,000–£39,999	71	20.4
£40,000–£49,999	47	13.5
£50,000–£59,999	22	6.3
£60,000–£69,000	26	7.4
£70,000–£79,999	13	3.7
£80,000–£89,000	12	3.4
£90,000–£99,000	8	2.3
£100,000–£149,999	12	3.4
More than £150,000	5	1.4
Prefer not to answer	16	4.6
Frequency of use of social commerce platform		
Daily	55	15.8
Weekly	150	43.0
Monthly	121	34.7
Once in 6 months	17	4.9
Once in a year	2	0.60
Other	4	1.1
Big Five Personality Traits		
Agreeableness	68	19.5
Conscientiousness	71	20.3
Extraversion	70	20.2
Openness to Experience	68	19.5
Neuroticism	72	20.6

3.2. Scale Measurement

All the measurement items were originally adopted from the preceding literature and adapted to the purpose of this research context. All constructs' measurement items were measured with a multi-item reflective scales' measurement. We measured social

support as a second-order construct, and information support (three-item) and emotional support (four-item) as lower-order constructs, adapted from Liang, Ho, Li, and Turban [36] and Bazi et al. [74]. The convenience construct included four items, which were adapted from Collier and Sherrell [75]. Items for positive and negative moods were adapted from Pappas et al. [76]. The purchase intention construct was measured with five items and adapted from Dodds et al. [77]. Personality traits were treated as control variables: Nine items measured the agreeableness, nine items measured the conscientiousness, eight items measured the extraversion, eight items measured neuroticism, and 10 items measured the openness to experience. All personality traits measurement items were adapted from John et al. [78] and used in Benet-Martínez and John [79] and Walczuch and Lundgren [80]. Seven-point Likert scales were employed to measure the items, anchored by (1) strongly agree to (7) strongly disagree.

3.3. Data Analysis

A variance-based structural equation modelling, particularly Partial Least Squares-Structural Equation Modelling (PLS-SEM), was employed to analyze the data and the model. PLS-SEM allows synchronous analysis of measurement and structural models. PLS-SEM is particularly useful in studies on achievement drivers (Hair et al. [81]) and purchase intention in this study, and it is considered as a prominent methodological approach [82,83], with a number of prominent journals publishing review studies documenting its use across a variety of disciplines, such as information management and marketing (see, for instance, Hair et al. [84] and Ringle, et al. [85]). PLS-SEM was chosen in this study over covariance-based SEM for its appropriateness in prediction applications and theory, such as the case in this study, rather than for testing an established theory [86]. PLS-SEM has the ability to test hierarchical component models, comprising higher-order constructs that are composed of lower-order factors that are formatively composed of higher-order factors [87], such as the conceptualization of social support in this study. Specifically, SmartPLS V3.3.3 [88] was employed.

3.4. Social Support as a Higher-Order Component

Hierarchical component models (HCMs) in this study were modelled for social support construct, using the repeated-indicators approach [89]. In this study, given that the number of indicators across the lower-order components (Informational and emotional support) forming the higher-order component (social support) are alike, thus satisfying the recommended requirement of Becker et al. [90], the repeated-indicators' approach was chosen to model social support as a higher-order component.

Social Support as formative HOC was tested to assess the measurement quality following Diamantopoulos and Winklhofer [91]. Measuring the correlation between LOCs of informational support and emotional support was 0.464. The results confirmed that social support was better modelled as a formative HOC, following Pavlou and El Sawy [92]. A formative HOC would lower the correlations between the LOC when a reflective higher-order component would show particularly high correlations among its lower-order component (often above 0.8). In terms of relationships between social support and its contributing higher-order components, both higher-order components had similar effects (informational support = 0.50, emotional support = 0.57), hence, having equal relevance in forming the HOC.

The variance inflation factor (VIF) was computed for informational and emotional supports to test whether the common bias would rise. A value above 10 indicates excessive multicollinearity and questions the validity of the formative structure [91]. In this study, VIF values for informational support (2.27) and emotional support (2.27) were within the satisfactory limits, of below 10 (VIF) and above 0.1 (tolerance), and also fulfilled the conservative values of Hair et al. [93] in PLS-SEM analysis that VIF should be below 5 and tolerance above 0.2, referring that common bias was not determined in the analysis.

3.5. Results: Evaluation of the Measurement Models

The measurement model was examined to assess the indicators' loadings, constructs' reliability, convergent validity, and discriminant validity. Table 2 explains the items' loading, construct reliability (CR), and average variance extracted (AVE). All the measurements' items' loading were above the threshold of 0.708, except two measurement items of convenience construct (CV1 and CV2) that were below the threshold; therefore, they were excluded from the analysis. The CR and AVE scores were all above the threshold of 0.70 and 0.50, respectively [94]. Therefore, the measurement model achieved a satisfactory internal consistence and convergent validity [95].

Table 2. Measurement items loading, CR, and AVE.

Constructs and Indicators	Item Loading	CR	AVE
Emotional Support			
SE1: Whenever I have faced difficulties, some people on <i>social commerce platforms</i> are on my side.	0.76	0.90	0.70
SE2: Whenever I have faced difficulties, some people on <i>social commerce platforms</i> comforted and encouraged me.	0.89		
SE3: Whenever I have faced difficulties, some people on <i>social commerce platforms</i> listened to me talking about my private feelings.	0.83		
SE4: Whenever I have faced difficulties, some people on <i>social commerce platforms</i> expressed interest and concern in my well-being.	0.86		
Informational Support			
SI1: Whenever I have been in need of help, some people on <i>social commerce platforms</i> have been offering me suggestions.	0.90	0.93	0.83
SI2: Whenever I have encountered a problem, some people on <i>social commerce platforms</i> would give information to help me overcome the problem	0.91		
SI3: Whenever I have faced difficulties, some people on <i>social commerce platforms</i> would help me discover the cause and provide me with suggestions	0.91		
Convenience			
CV3: I value the ability to use <i>social commerce platforms</i> from the comfort of home.	0.93	0.92	0.86
CV4: I like the ability to use <i>social commerce platforms</i> without leaving home.	0.92		
Positive Mood			
PM1: I feel happy after shopping from <i>social commerce platforms</i>	0.86	0.90	0.75
PM2: I have a warm feeling after shopping from <i>social commerce platforms</i>	0.90		
PM3: I feel valued after shopping from <i>social commerce platforms</i>	0.84		
Negative Mood			
NM1: I feel angry after shopping from <i>social commerce platforms</i>	0.92	0.95	0.86
NM2: I am in a bad mood after shopping from <i>social commerce platforms</i>	0.95		
NM3: I feel upset after shopping from <i>social commerce platforms</i>	0.91		
Purchase Intention			
PI1: The likelihood of purchasing a product featured on <i>social commerce platforms</i>	0.85	0.93	0.70
PI2: If I were going to buy a featured product, I would consider buying it from <i>social commerce platforms</i>	0.87		
PI3: I would consider buying a product featured on <i>social commerce platforms</i>	0.87		
PI4: The probability that I would consider buying a product from <i>social commerce platforms</i>	0.84		
PI5: My willingness to buy a product featured on <i>social commerce platforms</i> is	0.76		

Following Hair et al. [96], discriminant validity was then assessed using Fornell and Larcker [97] factors' correlations and Heterotrait–Monotrait ratio (HTMT) [98]. All the constructs' correlations were above the squared value of AVE, and HTMT ratio was under 0.85, which yields that the measurement model is discriminant valid. Table 3 illustrates the discriminant validity scores. Additionally, we tested the measurement model for the group-specific personality traits (Control variables) (see Appendices A and B for the assessment benchmark).

Table 3. Discriminant validity results.

Constructs	Social Support	Convenience	Positive Mood	Negative Mood	Purchase Intention
Social Support	0.81				
Convenience	−0.05 (0.10)	0.93			
Positive Mood	0.37 (0.29)	0.25 (0.29)	0.87		
Negative Mood	−0.01 (0.04)	−0.25 (0.28)	−0.30 (0.34)	0.93	
Purchase Intention	0.07 (0.12)	0.42 (0.49)	0.54 (0.62)	−0.35 (0.04)	0.84

3.6. Results: Evaluation of the Structural Model

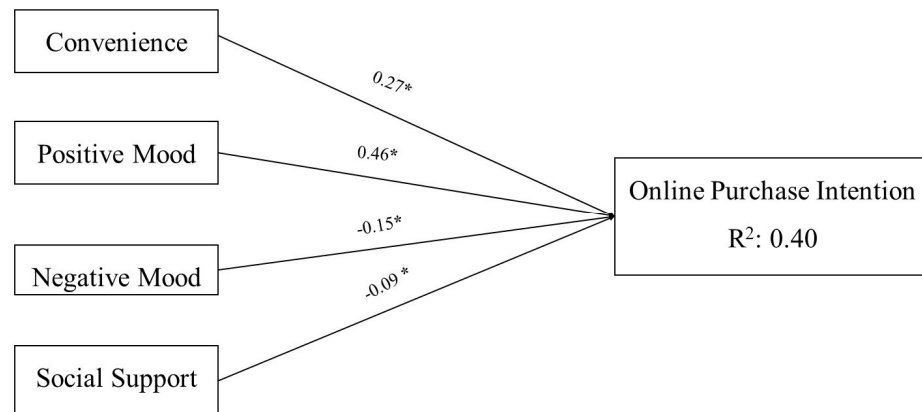
After measuring the inner model's validity and reliability, we assessed the structural model. The structural model assessment contains six main steps: assessing (1) "structural model for collinearity issues", (2) "the significant and relevance of the structural model relationships", (3) "the level of R2, (4) "the f2 effect size", (5) "the predictive relevance Q2", and (6) "the q2 effect size" [94]. Figure 2 illustrates the model test for the full path model. Table 5 illustrates the results of the complete model and the five personality traits' groups. Prior to testing the implications of control variables and gender and personality traits, we tested the configural invariance, compositional invariance, and the assessment of equal means and variances' assessments (MICOM), following Hair et al. [99], to establish invariance measurement across the two groups of gender and the five groups of personality traits (see online Supplementary Materials). Table 4 illustrates the structural model controlled by gender variable (Female and Male). For the female group, all hypotheses were supported, except the social support hypothesis, which social support influenced online purchase intention negatively, while in the Male group, all hypotheses were accepted, except hypothesis 4 (social support). For the whole model, all hypotheses were supported except negative mood (hypothesis 3) and the social support-related hypothesis (Hypothesis 4).

Table 4. Structural Model Result controlled by Gender.

Path	Female						
	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome
SS > PI	1.17	−0.13	[−0.23:−0.06]	2.82	0.00	0.03	Rejected
CV > PI	1.17	0.26	[0.16:0.36]	4.30	0.00	0.10	Accepted
PM > PI	1.40	0.48	[0.38:0.57]	8.03	0.00	0.28	Accepted
NM > PI	1.23	−0.11	[−0.23:−0.06]	1.88	0.03	0.02	Rejected
PI R ² : 0.42; PI Q ² : 0.27; PI Q ² effect size: 0.39							
Path	Male						
	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome
SS > PI	1.30	−0.03	[−0.13:−0.09]	0.45	0.33	0.03	Rejected
CV > PI	1.09	0.28	[0.12:0.45]	2.84	0.00	0.13	Accepted
PM > PI	1.38	0.43	[0.28:0.36]	4.98	0.01	0.28	Accepted
NM > PI	1.11	−0.23	[−0.37:−0.08]	2.54	0.01	0.08	Rejected
PI R ² : 0.42; PI Q ² : 0.29; PI Q ² effect size: 0.39							

Table 5. Results of the structural model.

Path	Complete Data							Agreeableness						
	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome
SS > PI	1.20	-0.09	[-0.16;-0.02]	2.05	0.02	0.01	Rejected	1.15	-0.05	[-0.15:0.06]	0.72	0.24	0.00	Rejected
CV > PI	1.13	0.27	[0.18:0.36]	4.73	0.00	0.11	Accepted	1.09	0.22	[0.11:0.34]	3.23	0.00	0.08	Accepted
PM > PI	1.37	0.46	[0.37:0.54]	9.11	0.00	0.25	Accepted	1.25	0.47	[0.36:0.57]	7.22	0.00	0.27	Accepted
NM > PI	1.15	-0.15	[-0.24;-0.07]	2.88	0.00	0.03	Rejected	1.17	-0.12	[-.25:0.00]	1.60	0.05	0.02	Rejected
PI R ² : 0.40; PI Q ² : 0.27; PI Q ² effect size: 0.38							PI R ² : 0.35; PI Q ² : 0.22; PI Q ² effect size: 0.30							
Path	Conscientiousness							Extraversion						
	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome
SS > PI	1.16	-0.08	[-0.18:0.02]	1.37	0.08	0.00	Rejected	1.44	-0.01	[-0.16:0.14]	0.17	0.43	0.00	Rejected
CV > PI	1.08	0.25	[0.14:0.35]	3.74	0.00	0.10	Accepted	1.35	0.16	[-0.01:0.33]	1.50	0.07	0.05	Accepted
PM > PI	1.30	0.48	[0.37:0.58]	7.65	0.00	0.27	Accepted	1.74	0.54	[0.31:0.72]	4.41	0.00	0.25	Accepted
NM > PI	1.12	-0.11	[-0.20;-0.02]	2.00	0.02	0.02	Rejected	1.50	-0.18	[-0.34;-0.01]	1.74	0.04	0.05	Rejected
PI R ² : 0.38; PI Q ² : 0.25; PI Q ² effect size: 0.34							PI R ² : 0.49; PI Q ² : 0.34; PI Q ² effect size: 0.40							
Path	Neuroticism							Openness to Experience						
	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome	VIF Value	Path Coeff	95% BC-CI	t-Value	p-Value	f-Square	Hypothesis Outcome
SS > PI	1.26	-0.11	[-0.22:0.03]	1.35	0.09	0.00	Rejected	1.22	-0.05	[-0.15:0.07]	0.68	0.25	0.02	Rejected
CV > PI	1.23	0.38	[0.15:0.59]	2.77	0.00	0.21	Accepted	1.14	0.23	[0.12:0.34]	3.41	0.00	0.09	Accepted
PM > PI	1.38	0.44	[0.30:0.59]	4.97	0.00	0.25	Accepted	1.44	0.51	[0.38:0.61]	7.22	0.00	0.29	Accepted
NM > PI	1.21	-0.13	[-0.32:0.03]	1.24	0.11	0.04	Rejected	1.24	-0.13	[-0.25;-0.01]	1.82	0.03	0.03	Rejected
PI R ² : 0.49; PI Q ² : 0.30; PI Q ² effect size: 0.39							PI R ² : 0.44; PI Q ² : 0.29; PI Q ² effect size: 0.41							



*: 0.05 significant level

Figure 2. Research model result.

4. Discussion

In this study, our main target was to investigate how the situational factors (i.e., convenience, positive mood, negative mood) and social support influence purchase intention on social commerce websites during the COVID-19 pandemic, particularly during the lockdown period in the UK (December 2020). We additionally controlled the effect of these situational factors on the big five personality traits: extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience. The analysis revealed several unique and insightful findings.

The findings showed that convenience and positive mood boost online buyers' intentions to purchase from social commerce websites, while negative mood does not. The results support the findings of prior studies, which indicated that convenience simplifies online shopping and purchase behavior [75,100]. The study's findings showed how positive and negative moods can facilitate online purchase intention in social commerce websites and can promote buyers' purchase intention in social commerce websites. In our study, negative mood decreased online purchase intention.

Contrary to expectations, social support findings were the inverse of the findings of previous literature in that buyers on social commerce websites did not seek social support or informational or emotional support during the COVID-19 pandemic. This was found across the five personality traits. Previous literature indicated that social support facilitates relationship quality with e-vendors [69], leading to reviews on social commerce websites and generating intention to continue using them [36], motivating users to share their experiences with others [9,101], encouraging buyers to write comments and contribute to the content of vendors on social commerce websites [102], and engaging customers in social commerce websites [74]. Unexpectedly, this study's findings revealed that social support across the five personality traits had completely different results.

The effect of situational factors varies depending on the personality trait. Agreeableness buyers do not buy from social commerce websites when they feel angry and upset, but they do when they are relaxed and feeling optimistic. Conscientiousness buyers are more willing to buy online when they are in a positive mood but do not buy when they are in a negative mood. The same results were for extravert and open-minded buyers. However, neurotic buyers become less willing to buy when they are in a pessimistic mood. These results stand in sharp contrast to previous studies in e-commerce, which found that personality traits are not associated with online retailers' trust [80].

4.1. Theoretical Contributions

By establishing an understanding of situational influences as a determinant of online purchase intention in social commerce websites during the COVID-19 pandemic, this study

provides a clear contribution to knowledge in several significant means and responds to Paul and Bhukya's [103], Donthu and Gustafsson's [104], a Das et al.'s [105] calls to study the impact of the COVID-19 pandemic on consumer purchase behavior. First, we built a model based on the situational and social support theories that clarified how buyers are faring with social commerce websites during the COVID-19 pandemic. To our knowledge, this study is one of the few empirical studies that assessed the situational factors over the big five personality traits during the COVID-19 pandemic, hence, enriching the social commerce literature.

Second, this study advances the knowledge on the role of social support in social commerce. Social support seems to be unimportant during the COVID-19 pandemic compared with the normal situation. Interestingly, the study showed that social distancing is practiced on social commerce websites as well. This might be attributed to the large amount of information being dispersed on the social commerce websites, which may have led buyers to rely less on others' support. In this study, consumers believed in their abilities to purchase without seeking information and/or emotional support. To be precise, the COVID-19 pandemic has changed consumers' purchasing intentions on social commerce websites.

Finally, this study expanded the model and assessed it on the big five personality traits, thus providing interesting insights into both the social commerce and personality literature. We believe that this study is the first step towards understanding the situational influences in social commerce research across the big five personality traits.

4.2. Practical Contributions

This study delivers some valuable insights into the impact of situational influences and social support on consumers' online buying intentions. Understanding the study's findings could enhance managers' knowledge about the factors that drive consumers towards online buying, especially during the COVID-19 pandemic. First, the results of this paper, in line with previous literature, suggest that managers should consider the convenience of their social commerce website in terms of its ability to reduce time and effort as a key stimulus that drives consumers to shop on their sites. Second, the study is also positive about the influence of consumers' moods on their intention to buy online during the pandemic. Based on the abovementioned points, managers are recommended to make the online shopping experience much friendlier and more exciting and entertaining for all consumers. Finally, social commerce managers should monitor customers' usage of social support features on their websites. If those features have no influence on consumers' online buying, as the study's findings imply, managers should pay more attention to the availability and abundance of information on their websites, so that consumers can buy without the help of others.

5. Limitations and Future Research

This study has several limitations. First, the generalizability of the findings is limited to the population of the study. A future study is suggested to examine samples from different countries. Second, the data were collected during a strict lockdown in the UK (in December 2020), which may have affected the respondents' online buying intentions during the COVID-19 pandemic. This limitation calls for a longitudinal study that investigates respondents' online buying intentions during different levels of precaution measures. Third, the study was not specific to a particular product (*i.e.*, item, line, or category). Hence, it was not possible to ascertain if the negative relationship between social support and online purchase intention holds true across product categories, especially if most consumers bought low-involvement products for which social support is unnecessary [106]. Marketing researchers are recommended to study the role of social support across different product categories. Fourth, the study focused on studying consumers' buying intentions on social commerce websites only, whereas many people may shop on pure e-commerce websites (*i.e.*, websites without social features). Therefore, a future study is encouraged

to include other types of e-commerce websites. Finally, only two situational influences (i.e., convenience and mood) were examined here. The reason behind this was already justified, but it is possible to test in future research other situational factors, such as time pressure and task definition, that would affect consumers’ online buying intentions during the COVID-19 pandemic.

Supplementary Materials: The following are available online at <https://www.mdpi.com/article/10.3390/jtaer17010006/s1>.

Author Contributions: Conceptualization, S.B. and H.H.; methodology, S.B. and N.H.; software, S.B.; validation, S.B., A.A.-A. and D.R.; formal analysis, S.B. and H.H.; investigation, S.B.; resources, S.B. and A.A.-A.; data curation, S.B.; writing—original draft preparation, S.B., H.H., A.A.-A., D.R., and N.H.; writing—review and editing, S.B.; visualization, S.B. and H.H.; supervision, S.B.; project administration, S.B.; funding acquisition, S.B. All authors have read and agreed to the published version of the manuscript.

Funding: The data collection was funded by the Scientific Research and Graduate Studies at Yarmouk University, Irbid, Jordan. The funding number is BD/119/12/5148.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study are available upon request from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Construct reliability and convergent validity.

Constructs and Indicators	Agreeableness Item Loadings	Conscientiousness		Extraversion		Neuroticism		Openness to Experience						
		CR	AVE	Item Loadings	CR	AVE	Item Loadings	CR	AVE					
Emotional Support		0.92	0.74		0.90	0.69		0.90	0.69		0.92	0.73		0.89
SE1	0.78			0.71			0.71			0.84			0.74	
SE2	0.91			0.91			0.87			0.88			0.87	
SE3	0.86			0.83			0.83			0.86			0.81	
SE4	0.89			0.87			0.90			0.86			0.86	
Informational Support		0.94	0.85		0.95	0.86		0.95	0.86		0.93	0.81		0.93
SI1	0.92			0.92			0.92			0.87			0.91	
SI2	0.92			0.93			0.92			0.92			0.90	
SI3	0.92			0.93			0.95			0.91			0.91	
Convenience		0.93	0.86		0.93	0.86		0.91	0.83		0.96	0.92		0.93
CV3	0.92			0.94			0.92			0.96			0.92	
CV4	0.94			0.91			0.90			0.96			0.94	
Positive Mood		0.89	0.72		0.90	0.74		0.90	0.76		0.93	0.83		0.90
PM1	0.85			0.83			0.83			0.9			0.86	
PM2	0.87			0.91			0.92			0.91			0.88	
PM3	0.83			0.84			0.86			0.92			0.86	
Negative Mood		0.94	0.84		0.94	0.85		0.96	0.88		0.95	0.87		0.94
NM1	0.90			0.92			0.91			0.94			0.92	
NM2	0.95			0.95			0.97			0.96			0.95	
NM3	0.90			0.89			0.94			0.89			0.88	
Purchase Intention		0.92	0.71		0.93	0.72		0.93	0.73		0.93	0.72		0.92
PI1	0.86			0.85			0.85			0.86			0.83	
PI2	0.86			0.86			0.90			0.91			0.83	
PI3	0.87			0.88			0.87			0.89			0.86	
PI4	0.85			0.85			0.84			0.83			0.85	
PI5	0.76			0.80			0.79			0.74			0.81	

Appendix B

Table A2. Discriminant validity results for Agreeableness group.

Constructs	Social Support	Convenience	Positive Mood	Negative Mood	Purchase Intention
Social Support	0.84				
Convenience	-0.10 <i>(0.12)</i>	0.93			
Positive Mood	0.32 <i>(0.39)</i>	0.12 <i>(0.15)</i>	0.85		
Negative Mood	0.01 <i>(0.05)</i>	-0.25 <i>(0.28)</i>	-0.30 <i>(0.34)</i>	0.92	
Purchase Intention	0.08 <i>(0.11)</i>	0.31 <i>(0.36)</i>	0.52 <i>(0.35)</i>	-0.32 <i>(0.35)</i>	0.84

The scores in roman are correlations of the constructs, and the scores in italic are the HTMT ratios.

Table A3. Discriminant validity results for Conscientiousness group.

Constructs	Social Support	Convenience	Positive Mood	Negative Mood	Purchase Intention
Social Support	0.84				
Convenience	-0.10 <i>(0.12)</i>	0.93			
Positive Mood	0.32 <i>(0.39)</i>	0.12 <i>(0.15)</i>	0.85		
Negative Mood	0.01 <i>(0.05)</i>	-0.25 <i>(0.28)</i>	-0.30 <i>(0.34)</i>	0.92	
Purchase Intention	0.08 <i>(0.11)</i>	0.31 <i>(0.36)</i>	0.52 <i>(0.35)</i>	-0.32 <i>(0.35)</i>	0.84

The scores in roman are correlations of the constructs, and the scores in italic are the HTMT ratios.

Table A4. Discriminant validity results for Extraversion group.

Constructs	Social Support	Convenience	Positive Mood	Negative Mood	Purchase Intention
Social Support	0.82				
Convenience	-0.20 <i>(0.24)</i>	0.91			
Positive Mood	0.44 <i>(0.50)</i>	0.25 <i>(0.31)</i>	0.87		
Negative Mood	0.00 <i>(0.08)</i>	-0.43 <i>(0.49)</i>	-0.46 <i>(0.53)</i>	0.94	
Purchase Intention	0.19 <i>(0.23)</i>	0.37 <i>(0.43)</i>	0.65 <i>(0.75)</i>	-0.46 <i>(0.52)</i>	0.85

The scores in roman are correlations of the constructs, and the scores in italic are the HTMT ratios.

Table A5. Discriminant validity results for Neuroticism group.

Constructs	Social Support	Convenience	Positive Mood	Negative Mood	Purchase Intention
Social Support	0.83				
Convenience	0.14 <i>(0.15)</i>	0.96			
Positive Mood	0.41 <i>(0.36)</i>	0.33 <i>(0.36)</i>	0.91		
Negative Mood	0.09 <i>(0.37)</i>	-0.34 <i>(0.37)</i>	-0.22 <i>(0.24)</i>	0.93	
Purchase Intention	0.12 <i>(0.61)</i>	0.55 <i>(0.61)</i>	0.55 <i>(0.59)</i>	-0.37 <i>(0.40)</i>	0.85

The scores in roman are correlations of the constructs, and the scores in italic are the HTMT ratios.

Table A6. Discriminant validity results for openness to experience group.

Constructs	Social Support	Convenience	Positive Mood	Negative Mood	Purchase Intention
Social Support	0.79				
Convenience	-0.03 <i>(0.09)</i>	0.93			
Positive Mood	0.26 <i>(0.44)</i>	0.26 <i>(0.30)</i>	0.87		
Negative Mood	-0.29 <i>(0.06)</i>	-0.29 <i>(0.33)</i>	-0.37 <i>(0.41)</i>	0.92	
Purchase Intention	0.40 <i>(0.21)</i>	0.40 <i>(0.46)</i>	0.60 <i>(0.68)</i>	-0.38 <i>(0.42)</i>	0.85

The scores in roman are correlations of the constructs, and the scores in italic are the HTMT ratios.

References

1. Johns Hopkins University. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). Available online: <https://coronavirus.jhu.edu/map.html> (accessed on 5 November 2020).
2. Anderson, R.M.; Heesterbeek, H.; Klinkenberg, D.; Hollingsworth, T.D. How will country-based mitigation measures influence the course of the COVID-19 epidemic? *Lancet* **2020**, *395*, 931–934. [CrossRef]
3. Jia, J.S.; Lu, X.; Yuan, Y.; Xu, G.; Jia, J.; Christakis, N.A. Population flow drives spatio-temporal distribution of COVID-19 in China. *Nature* **2020**, *582*, 389–394. [CrossRef] [PubMed]
4. Oksanen, A.; Kaakinen, M.; Latikka, R.; Savolainen, I.; Savela, N.; Koivula, A. Regulation and Trust: 3-Month Follow-up Study on COVID-19 Mortality in 25 European Countries. *JMIR Public Health Surveill* **2020**, *6*, e19218. [CrossRef] [PubMed]
5. Verma, S.; Gustafsson, A. Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach. *J. Bus. Res.* **2020**, *118*, 253–261. [CrossRef] [PubMed]
6. Tran, L.T.T. Managing the effectiveness of e-commerce platforms in a pandemic. *J. Retail. Consum. Serv.* **2021**, *58*, 102287. [CrossRef]
7. Bentall, R.P.; Lloyd, A.; Bennett, K.; McKay, R.; Mason, L.; Murphy, J.; McBride, O.; Hartman, T.K.; Gibson-Miller, J.; Levita, L.; et al. Pandemic buying: Testing a psychological model of over-purchasing and panic buying using data from the United Kingdom and the Republic of Ireland during the early phase of the COVID-19 pandemic. *PLoS ONE* **2021**, *16*, e0246339. [CrossRef]
8. Kim, R.Y. The Impact of COVID-19 on Consumers: Preparing for Digital Sales. *IEEE Eng. Manage. Rev.* **2020**, *48*, 212–218. [CrossRef]
9. Tajvidi, M.; Wang, Y.; Hajli, N.; Love, P.E.D. Brand value Co-creation in social commerce: The role of interactivity, social support, and relationship quality. *Comput. Hum. Behav.* **2017**, *115*, 105238. [CrossRef]
10. Busalim, A.H.; Ghabban, F.; Hussin, A.R.C. Customer engagement behaviour on social commerce platforms: An empirical study. *Technol. Soc.* **2021**, *64*, 101437. [CrossRef]
11. Horng, S.-M.; Wu, C.-L. How behaviors on social network sites and online social capital influence social commerce intentions. *Inf. Manag.* **2020**, *57*, 103176. [CrossRef]
12. Ko, H.-C. Social desire or commercial desire? The factors driving social sharing and shopping intentions on social commerce platforms. *Electron. Commer. Res. Appl.* **2018**, *28*, 1–15. [CrossRef]
13. Hu, X.; Chen, Z.; Davison, R.M.; Liu, Y. Charting consumers' continued social commerce intention. *Internet Res.* **2021**, in press. [CrossRef]
14. Lin, J.; Li, L.; Yan, Y.; Turel, O. Understanding Chinese consumer engagement in social commerce. *Internet Res.* **2018**, *28*, 2–22. [CrossRef]
15. Fang, Y.-H.; Li, C.-Y. Leveraging sociability for trust building on social commerce sites. *Electron. Commer. Res. Appl.* **2020**, *40*, 100907. [CrossRef]
16. Huang, Z.; Benyoucef, M. The effects of social commerce design on consumer purchase decision-making: An empirical study. *Electron. Commer. Res. Appl.* **2017**, *25*, 40–58. [CrossRef]
17. Wang, X.; Tajvidi, M.; Lin, X.; Hajli, N. Towards an Ethical and Trustworthy Social Commerce Community for Brand Value Co-creation: A trust-Commitment Perspective. *J. Bus. Ethics* **2020**, *167*, 137–152. [CrossRef]
18. Guo, L.; Hu, X.; Lu, J.; Ma, L. Effects of customer trust on engagement in live streaming commerce: Mediating role of swift guanxi. *Internet Res.* **2021**, in press. [CrossRef]
19. Abed, S.S. Social commerce adoption using TOE framework: An empirical investigation of Saudi Arabian SMEs. *Int. J. Inf. Manag.* **2020**, *53*, 102118. [CrossRef]
20. Chen, Y.; Lu, Y.; Wang, B.; Pan, Z. How do product recommendations affect impulse buying? An empirical study on WeChat social commerce. *Inf. Manag.* **2019**, *56*, 236–248. [CrossRef]
21. Areiza-Padilla, J.A.; Galindo-Becerra, T.; Del Río, M.C. Social Networks and E-Loyalty: A New Means of Sports Training during COVID-19 Quarantines. *J. Theor. Appl. Electron. Commer. Res.* **2021**, *16*, 2808–2823. [CrossRef]
22. Esmaeili, L.; Hashemi, G.S.A. A systematic review on social commerce. *J. Strateg. Mark.* **2019**, *27*, 317–355. [CrossRef]

23. Gu, S.; Ślusarczyk, B.; Hajizada, S.; Kovalyova, I.; Sakhbieva, A. Impact of the COVID-19 Pandemic on Online Consumer Purchasing Behavior. *J. Theor. Appl. Electron. Commer. Res.* **2021**, *16*, 2263–2281. [[CrossRef](#)]
24. Belk, R.W. Situational Variables and Consumer Behavior. *J. Consum. Res.* **1975**, *2*, 157–164. [[CrossRef](#)]
25. Guo, H.; Liu, Y.; Shi, X.; Chen, K.Z. The role of e-commerce in the urban food system under COVID-19: Lessons from China. *China Agric. Econ. Rev.* **2020**, in press. [[CrossRef](#)]
26. Pereira, H.G.; de Fátima Salgueiro, M.; Mateus, I. Say yes to Facebook and get your customers involved! Relationships in a world of social networks. *Bus. Horiz.* **2014**, *57*, 695–702. [[CrossRef](#)]
27. Jiang, L.; Yang, Z.; Jun, M. Measuring consumer perceptions of online shopping convenience. *J. Serv. Manag.* **2013**, *24*, 191–214. [[CrossRef](#)]
28. Naeem, M. Understanding the customer psychology of impulse buying during COVID-19 pandemic: Implications for retailers. *Int. J. Retail. Distrib. Manag.* **2021**, *49*, 377–393. [[CrossRef](#)]
29. Chen, T.-Y.; Yeh, T.-L.; Lo, W.-C. Impacts on Online Impulse Purchase through Perceived Cognition. *J. Int. Consum. Mark.* **2017**, *29*, 319–330. [[CrossRef](#)]
30. Zhuang, G.; Tsang, A.S.L.; Zhou, N.; Li, F.; Nicholls, J.A.F. Impacts of situational factors on buying decisions in shopping malls. *Eur. J. Mark.* **2006**, *40*, 17–43. [[CrossRef](#)]
31. Lee, J.; Lee, Y. Does online shopping make consumers feel better? Exploring online retail therapy effects on consumers' attitudes towards online shopping malls. *Asia Pac. J. Market. Logist.* **2019**, *31*, 464–479. [[CrossRef](#)]
32. Gottlieb, B.H.; Bergen, A.E. Social support concepts and measures. *J. Psychosom. Res.* **2010**, *69*, 511–520. [[CrossRef](#)]
33. Berkman, L.F.; Glass, T.; Brissette, I.; Seeman, T.E. From social integration to health: Durkheim in the new millennium. *Soc. Sci. Med.* **2000**, *51*, 843–857. [[CrossRef](#)]
34. Lin, X.; Zhang, D.; Li, Y. Delineating the dimensions of social support on social networking sites and their effects: A comparative model. *Comput. Hum. Behav.* **2016**, *58*, 421–430. [[CrossRef](#)]
35. Pfeil, U. Online support communities. In *Social Computing and Virtual Communities*; Zaphiris, P., Ang, C.S., Eds.; Chapman & Hall/CRC: New York, NY, USA, 2009; pp. 122–150.
36. Liang, T.-P.; Ho, Y.-T.; Li, Y.-W.; Turban, E. What Drives Social Commerce: The Role of Social Support and Relationship Quality. *Int. J. Electron. Commer.* **2011**, *16*, 69–90. [[CrossRef](#)]
37. Chen, J.; Shen, X.-L. Consumers' decisions in social commerce context: An empirical investigation. *Decis. Support. Syst.* **2015**, *79*, 55–64. [[CrossRef](#)]
38. Chiu, C.-M.; Huang, H.-Y.; Cheng, H.-L.; Sun, P.-C. Understanding online community citizenship behaviors through social support and social identity. *Int. J. Inf. Manag.* **2015**, *35*, 504–519. [[CrossRef](#)]
39. Sen, S.; Raghu, T.S.; Vinze, A. Demand Information Sharing in Heterogeneous IT Services Environments. *J. Manag. Inf. Syst.* **2010**, *26*, 287–316. [[CrossRef](#)]
40. Kraut, R.; Kiesler, S.; Boneva, B.; Cummings, J.; Helgeson, V.; Crawford, A. Internet Paradox Revisited. *J. Soc. Issues* **2002**, *58*, 49–74. [[CrossRef](#)]
41. Ridings, C.M.; Gefen, D. Virtual community attraction: Why people hang out online. *J. Comput.-Mediat. Commun.* **2004**, *10*, JCMC10110. [[CrossRef](#)]
42. Wellman, B.; Wortley, S. Different strokes from different folks: Community ties and social support. *Am. J. Sociol.* **1990**, *96*, 558–588. [[CrossRef](#)]
43. Bagozzi, R.P.; Dholakia, U.M. Intentional social action in virtual communities. *J. Interact. Mark.* **2002**, *16*, 2–21. [[CrossRef](#)]
44. Liang, T.-P.; Turban, E. Introduction to the special issue social commerce: A research framework for social commerce. *Int. J. Electron. Commer.* **2011**, *16*, 5–14. [[CrossRef](#)]
45. Wang, X.; Yu, C.; Wei, Y. Social Media Peer Communication and Impacts on Purchase Intentions: A Consumer Socialization Framework. *J. Interact. Mark.* **2012**, *26*, 198–208. [[CrossRef](#)]
46. Muangmee, C.; Kot, S.; Meekaewkunchorn, N.; Kassakorn, N.; Khalid, B. Factors Determining the Behavioral Intention of Using Food Delivery Apps during COVID-19 Pandemics. *J. Theor. Appl. Electron. Commer. Res.* **2021**, *16*, 1297–1310. [[CrossRef](#)]
47. Chen, Y.; Xie, J. Third-Party Product Review and Firm Marketing Strategy. *Mark. Sci.* **2005**, *24*, 218–240. [[CrossRef](#)]
48. Shanmugam, M.; Sun, S.; Amidi, A.; Khani, F.; Khani, F. The applications of social commerce constructs. *Int. J. Inf. Manag.* **2016**, *36*, 425–432. [[CrossRef](#)]
49. Herrando, C.; Jimenez-Martinez, J.; Martin-De Hoyos, M.J. Tell me your age and I tell you what you trust: The moderating effect of generations. *Internet Res.* **2019**, *29*, 799–817. [[CrossRef](#)]
50. Tunçgenç, B.; El Zein, M.; Sulik, J.; Newson, M.; Zhao, Y.; Dezechache, G.; Deroy, O. Social influence matters: We follow pandemic guidelines most when our close circle does. *Br. J. Psychol.* **2021**, *112*, 763–780. [[CrossRef](#)] [[PubMed](#)]
51. Jani, D.; Han, H. Personality, social comparison, consumption emotions, satisfaction, and behavioral intentions. *Int. J. Contemp. Hosp. Manag.* **2013**, *25*, 970–993. [[CrossRef](#)]
52. Costa Jr, P.T.; McCrae, R.R. The Revised NEO Personality Inventory (NEO-PI-R). In *The SAGE Handbook of Personality Theory and Assessment, Vol 2: Personality Measurement and Testing*; Sage Publications, Inc.: Thousand Oaks, CA, USA, 2008; pp. 179–198.
53. Błachnio, A.; Przepiorka, A.; Senol-Durak, E.; Durak, M.; Sherstyuk, L. The role of personality traits in Facebook and Internet addictions: A study on Polish, Turkish, and Ukrainian samples. *Comput. Hum. Behav.* **2017**, *68*, 269–275. [[CrossRef](#)]

54. Donnellan, M.B.; Oswald, F.L.; Baird, B.M.; Lucas, R.E. The Mini-IPIP Scales: Tiny-yet-effective measures of the Big Five Factors of Personality. *Psychol. Assess.* **2006**, *18*, 192–203. [[CrossRef](#)] [[PubMed](#)]
55. McCrae, R.R.; Costa, P.T. A contemplated revision of the NEO Five-Factor Inventory. *Personal. Individ. Differ.* **2004**, *36*, 587–596. [[CrossRef](#)]
56. Schmitt, D.P.; Realo, A.; Voracek, M.; Allik, J. Why can't a man be more like a woman? Sex differences in Big Five personality traits across 55 cultures. *J. Personal. Soc. Psychol.* **2008**, *94*, 168–182. [[CrossRef](#)] [[PubMed](#)]
57. Butt, S.; Phillips, J.G. Personality and self reported mobile phone use. *Comput. Hum. Behav.* **2008**, *24*, 346–360. [[CrossRef](#)]
58. McCrae, R.R.; John, O.P. An Introduction to the Five-Factor Model and Its Applications. *J. Personal.* **1992**, *60*, 175–215. [[CrossRef](#)] [[PubMed](#)]
59. Olson, B.D.; Suls, J. Self-, other-, and ideal-judgments of risk and caution as a function of the five-factor model of personality. *Personal. Individ. Differ.* **2000**, *28*, 425–436. [[CrossRef](#)]
60. Ozer, D.J.; Benet-Martínez, V. Personality and the Prediction of Consequential Outcomes. *Annu. Rev. Psychol.* **2006**, *57*, 401–421. [[CrossRef](#)] [[PubMed](#)]
61. McCrae, R.R.; Costa, P.T. Validation of the five-factor model of personality across instruments and observers. *J. Personal. Soc. Psychol.* **1987**, *52*, 81–90. [[CrossRef](#)]
62. Ha, H.-Y. The effects of online shopping attributes on satisfaction–purchase intention link: A longitudinal study. *Int. J. Consum. Stud.* **2012**, *36*, 327–334. [[CrossRef](#)]
63. Park, J.; Kim, J. The Importance of Perceived Consumption Delay in Internet Shopping: Time-Related Information, Time Risk, Attitude, and Purchase Intention. *Cloth. Text. Res. J.* **2007**, *25*, 24–41. [[CrossRef](#)]
64. Koo, D.-M.; Ju, S.-H. The interactional effects of atmospherics and perceptual curiosity on emotions and online shopping intention. *Comput. Hum. Behav.* **2010**, *26*, 377–388. [[CrossRef](#)]
65. Lee, M.; Lee, H.-H. Do parasocial interactions and vicarious experiences in the beauty YouTube channels promote consumer purchase intention? *Int. J. Consum. Stud.* **2021**, in press. [[CrossRef](#)]
66. Chen, C.; Xie, K.; Wang, S. The influence of incidental affect and mood-changing price on online booking intention. *J. Hosp. Tour. Technol.* **2017**, *8*, 357–371. [[CrossRef](#)]
67. Nguyen, L.T.V.; Conduit, J.; Lu, V.N.; Hill, S.R. Collective empowerment in online communities: Conceptualization, scale refinement, and validation. *J. Mark. Theory Pract.* **2020**, *28*, 301–317. [[CrossRef](#)]
68. Bai, Y.; Yao, Z.; Dou, Y.-F. Effect of social commerce factors on user purchase behavior: An empirical investigation from renren.com. *Int. J. Inf. Manag.* **2015**, *35*, 538–550. [[CrossRef](#)]
69. Hajli, M.N. The role of social support on relationship quality and social commerce. *Technol. Forecast. Soc. Chang.* **2014**, *87*, 17–27. [[CrossRef](#)]
70. Sheikh, Z.; Islam, T.; Rana, S.; Hameed, Z.; Saeed, U. Acceptance of social commerce framework in Saudi Arabia. *Telemat. Inform.* **2017**, *34*, 1693–1708. [[CrossRef](#)]
71. Bianchi, C.; Andrews, L.; Wiese, M.; Fazal-E-Hasan, S. Consumer intentions to engage in s-commerce: A cross-national study. *J. Mark. Manag.* **2017**, *33*, 464–494. [[CrossRef](#)]
72. Faul, F.; Erdfelder, E.; Buchner, A.; Lang, A.-G. Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behav. Res. Methods* **2009**, *41*, 1149–1160. [[CrossRef](#)]
73. Hair, J.F.; Babin, B.J.; Anderson, R.E.; Black, W.C. *Multivariate Data Analysis*, 8th ed.; Cengage Learning EMEA: Hampshire, UK, 2019.
74. Bazi, S.; Hajli, A.; Hajli, N.; Mohana, S.; Lin, X. Winning engaged consumers: The rules of brand engagement and intention of co-creation in social commerce. *Inf. Technol. People* **2019**, *33*, 456–476. [[CrossRef](#)]
75. Collier, J.E.; Sherrell, D.L. Examining the influence of control and convenience in a self-service setting. *J. Acad. Mark. Sci.* **2010**, *38*, 490–509. [[CrossRef](#)]
76. Pappas, I.O.; Kourouthanassis, P.E.; Giannakos, M.N.; Chrissikopoulos, V. Shiny happy people buying: The role of emotions on personalized e-shopping. *Electron. Mark.* **2014**, *24*, 193–206. [[CrossRef](#)]
77. Dodds, W.B.; Monroe, K.B.; Grewal, D. Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *J. Mark. Res.* **1991**, *28*, 307–319. [[CrossRef](#)]
78. John, O.P.; Donahue, E.; Kentle, R.L. *The Big Five Inventory: Versions 4a and 54 [Technical Report]*; University of California, Institute of Personality and Social Research: Berkeley, CA, USA, 1991.
79. Benet-Martínez, V.; John, O.P. Los Cinco Grandes Across Cultures and Ethnic Groups: Multitrait Multimethod Analyses of the Big Five in Spanish and English. *J. Personal. Soc. Psychol.* **1998**, *75*, 729–750. [[CrossRef](#)]
80. Walczuch, R.; Lundgren, H. Psychological antecedents of institution-based consumer trust in e-retailing. *Inf. Manag.* **2004**, *42*, 159–177. [[CrossRef](#)]
81. Hair, J.F.; Ringle, C.M.; Sarstedt, M. PLS-SEM: Indeed a Silver Bullet. *J. Mark. Theory Pract.* **2011**, *19*, 139–152. [[CrossRef](#)]
82. Henseler, J.; Dijkstra, T.K.; Sarstedt, M.; Ringle, C.M.; Diamantopoulos, A.; Straub, D.W.; Ketchen, D.J.; Hair, J.F.; Hult, G.T.M.; Calantone, R.J. Common Beliefs and Reality about Partial Least Squares: Comments on Rönkkö & Evermann (2013). *Organ. Res. Methods* **2014**, *17*, 182–209. [[CrossRef](#)]
83. Sarstedt, M.; Ringle, C.M.; Smith, D.; Reams, R.; Hair, J.F. Partial Least Squares Structural Equation Modeling (PLS-SEM): A Useful Tool for Family Business Researchers. *J. Fam. Bus. Strategy* **2014**, *5*, 105–115. [[CrossRef](#)]

84. Hair, J.F.; Sarstedt, M.; Pieper, T.M.; Ringle, C.M. Applications of Partial Least Squares Path Modeling in Management Journals: A Review of Past Practices and Recommendations for Future Applications. *Long Range Plan.* **2012**, *45*, 320–340. [[CrossRef](#)]
85. Ringle, C.M.; Sarstedt, M.; Straub, D.W. Editor's comments: A critical look at the use of PLS-SEM in MIS quarterly. *MIS Q.* **2012**, *36*, iii–xiv. [[CrossRef](#)]
86. Gefen, D.; Straub, D.; Boudreau, M.-C. Structural equation modeling and regression: Guidelines for research practice. *Commun. Assoc. Inf. Syst.* **2000**, *4*, 7. [[CrossRef](#)]
87. Siponen, M.; Vance, A. Neutralization: New insights into the problem of employee information systems security policy violations. *MIS Q.* **2010**, *34*, 487–502. [[CrossRef](#)]
88. Ringle, C.M.; Wende, S.; Becker, J.-M. *SmartPLS 3*; SmartPLS: Bönningstedt, Germany, 2015.
89. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M.; Thiele, K.O. Mirror, Mirror on the Wall: A Comparative Evaluation of Composite-based Structural Equation Modeling Methods. *J. Acad. Mark. Sci.* **2017**, *45*, 616–632. [[CrossRef](#)]
90. Becker, J.M.; Klein, K.; Wetzels, M. Hierarchical Latent Variable Models in PLS-SEM: Guidelines for Using Reflective-Formative Type Models. *Long Range Plan.* **2012**, *45*, 359–394. [[CrossRef](#)]
91. Diamantopoulos, A.; Winklhofer, H.M. Index Construction with Formative Indicators: An Alternative to Scale Development. *J. Mark. Res.* **2001**, *38*, 269–277. [[CrossRef](#)]
92. Pavlou, P.A.; El Sawy, O.A. From IT leveraging competence to competitive advantage in turbulent environments: The case of new product development. *Inf. Syst. Res.* **2006**, *17*, 198–227. [[CrossRef](#)]
93. Hair, J.F.; Sarstedt, M.; Ringle, C.M.; Mena, J.A. An Assessment of the Use of Partial Least Squares Structural Equation Modeling in Marketing Research. *J. Acad. Mark. Sci.* **2012**, *40*, 414–433. [[CrossRef](#)]
94. Hair, J.F.; Hult, G.T.M.; Ringle, C.M.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd ed.; Sage: Thousand Oaks, CA, USA, 2017.
95. Bagozzi, R.P.; Yi, Y. On the evaluation of structural equation models. *J. Acad. Mark. Sci.* **1988**, *16*, 74–94. [[CrossRef](#)]
96. Hair, J.F.; Risher, J.J.; Sarstedt, M.; Ringle, C.M. When to Use and How to Report the Results of PLS-SEM. *Eur. Bus. Rev.* **2019**, *31*, 2–24. [[CrossRef](#)]
97. Fornell, C.; Larcker, D.F. Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *J. Mark. Res.* **1981**, *18*, 382–388. [[CrossRef](#)]
98. 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](#)]
99. Hair, J.; Sarstedt, M.; Gudergan, S.P.; Ringle, C.M. *Advanced Issues in Partial Least Squares Structural Equation Modeling*; SAGE Publications, Incorporated: Thousand Oaks, CA, USA, 2017.
100. Torkzadeh, G.; Dhillon, G. Measuring Factors that Influence the Success of Internet Commerce. *Inf. Syst. Res.* **2002**, *13*, 187–204. [[CrossRef](#)]
101. Nadeem, W.; Juntunen, M.; Shirazi, F.; Hajli, N. Consumers' value co-creation in sharing economy: The role of social support, consumers' ethical perceptions and relationship quality. *Technol. Forecast. Soc. Chang.* **2020**, *151*, 119786. [[CrossRef](#)]
102. Chun, J.W.; Lee, M.J. When does individuals' willingness to speak out increase on social media? Perceived social support and perceived power/control. *Comput. Hum. Behav.* **2017**, *74*, 120–129. [[CrossRef](#)]
103. Paul, J.; Bhukya, R. Forty-five years of International Journal of Consumer Studies: A bibliometric review and directions for future research. *Int. J. Consum. Stud.* **2021**, *45*, 937–963. [[CrossRef](#)]
104. Donthu, N.; Gustafsson, A. Effects of COVID-19 on business and research. *J. Bus. Res.* **2020**, *117*, 284–289. [[CrossRef](#)]
105. Das, G.; Jain, S.P.; Maheswaran, D.; Slotegraaf, R.J.; Srinivasan, R. Pandemics and marketing: Insights, impacts, and research opportunities. *J. Acad. Mark. Sci.* **2021**, *49*, 835–854. [[CrossRef](#)]
106. Grashuis, J.; Skevas, T.; Segovia, M.S. Grocery Shopping Preferences during the COVID-19 Pandemic. *Sustainability* **2020**, *12*, 5369. [[CrossRef](#)]