The Role of Social Presence and Trust on Customer Loyalty

eCommerce and social media technologies can significantly benefit the food and beverage industry in reducing costs and streamlining supply activities, and most importantly, by engaging users in active interaction and enhancing social presence. This research develops an empirical study to examine the role of trust and social presence on loyalty. We collect data through survey and analysis the data with SEM-PLS. The theoretical contribution of this research is to examine the impact of social presence and trust in loyalty in the food and beverage industry. Our finding contributes to the food and beverage industry, particularly in the COVID-19 era, as more consumers are buying through e-commerce platforms.

**Keywords:** E-commerce; Social Presence of Interaction; Trust in Social Media; Loyalty
1. Introduction

The eCommerce market has been growing rapidly in the past few decades, which led to businesses shifting from traditional marketing to online marketing, particularly in the food and beverage sector. The global revenue of the food and beverage industry is projected to reach $236 billion, with an annual growth of 9.7% and a user penetration rate of 14% in 2020 (Statista, 2020a). In addition, the average revenue per user is projected to reach $227.08 in 2020 (Statista, 2020a). Despite an economic slowdown due to the recent covid-19 pandemic, the growth in the food and beverage industry may be attributed to the increase in eCommerce operations and the increasing reliance of consumers on online transactions. Accordingly, it is projected that the global eCommerce market will cross $2 trillion in 2020 (Statista, 2020b).

However, the food and beverage industry is one of the challenging industries for implementing eCommerce as it requires faster delivery of perishable goods, reducing high costs in supply chain operations, and fostering same day deliveries. Since last year, the Covid-19 pandemic has rapidly forced many public and private businesses to become predominantly dependent on social commerce. Social commerce has empowered the existence of many businesses all over the world; examples of such perspectives can be in the food and beverage industry. Many food and beverage outlets forced to close during the pick of the pandemic. Thus, many restaurants and café standing up online stores. Going direct-to-consumer allows them to control the brand experience, build direct relationships with customer, and increase customer loyalty, even as many businesses struggle to survive.

Nevertheless, this pandemic may also have potential consequences such as loss of confidence and trust. It is identified that consumers of the food and beverage industry do not trust their food suppliers as much as they used to, and more than 50% of them switched brands either to save money or because of rising concerns over safety (U.S. Commercial Service, 2020). As a
result, there is a need to extend the research on the consumers' trust and loyalty in the food and beverage industry to analyse their behavioural patterns.

Research shows that social media is a key factor in developing trust and Loyalty (Hajli, 2014, 2015; Hajli, Shanmugam, Powell, & Love, 2015; Lin, Wang, & Hajli, 2019). Social media is effective in influencing consumers trust and loyalty in various industries. Accordingly, businesses are increasingly relying on social media for improving customer relationships and improved customer relationships to have a positive impact on brand trust and Loyalty (Laroche et al., 2013; Hajli, Shanmugam, Papagiannidis, Zahay, & Richard, 2017; Tajvidi, Richard, Wang, & Hajli, 2018; Tajvidi, Wang, Hajli, & Love, 2017). Social media platforms such as Facebook effectively engage consumers online where consumers could relate and analyse recommendations, reviews and ratings related to a brand (Hajli, 2015; Hajli, Lin, Featherman, & Wang, 2014). These platforms are integrated with social media and positively affect consumers' attitudes towards a brand (Nadeem et al., 2015). Social media can facilitate consumers' engagement and loyalty towards the brand on online commerce platforms by increasing the consumers' social presence, as consumers can interact with peers and company, ensuring the availability of rich information through reviews, ratings, and feedback etc. (Molinillo et al., 2020). Focusing on the food and beverage industry, availability of rich information such as quality of food, hygiene, safety procedures of a brand from direct consumers may influence other users trust and loyalty. However, social media has more likelihood of influencing attitudinal loyalty than behavioural Loyalty (Hajli et al., 2017b); however, it may not be loyalty-generating in its own right. Besides, consumers may shift their loyalty depending on various factors, which may be arising out of various situations. For instance, the Covid-19 pandemic, though led to the increase in online business, consumers are shifting to other brands due to safety, hygiene, and cost-savings (U.S. Commercial Service, 2020).
To fill the above-mentioned gaps, this study pursues to investigate two issues: (1) to investigate the relationship between the social presence of interaction and loyalty (2) whether the mediating roles of trust explain the relation between social presence of interaction and loyalty. The rest of the paper is structured as follows. The next section presents the previous literature and the research hypotheses of this study. In the third section, the methodology is described. The fourth section discusses the findings of our empirical study. Finally, the paper is concluded by discussing and the study's limitations and suggestions for future study are offered.

2. Literature review

Trust and loyalty are two important factors that can influence the sustainability of a business or an organisation. Focusing on the food and beverage industry, the activity of eating out to socialise has become more prominent than recognising the activity as a need. As a result, the process of decision-making and choices of the consumers and factors influencing these processes are becoming prominent in research in the food and beverage industry. In this context, one of the important factors being extensively researched is brand loyalty and consumer loyalty. Brand loyalty can lead to various advantages for businesses in the food and beverage industry. For instance, consumers loyal to a brand may be less influenced by rival brands' activities and enhance customer retention; whereas, consumers' loyalty can be influenced by service quality and price fairness (Konuk, 2019). A study in Malaysia has identified that service quality (tangibles, reliability, assurance, and empathy) and price fairness positively correlate with customer loyalty in new cafes and restaurants (Moorthy et al., 2016).

Similarly, consumers' trust is identified to be significantly correlated with the perceived quality, behavioural attitudes, subjective norms and perceived behavioural control (Bazi et
al., 2019; Nadeem et al., 2019). External factors such as epidemics may also influence consumers' behavioural attitudes and behavioural control relating to consumption. Therefore, food and beverage companies may need to adopt various strategies in increasing consumers' retention and loyalty. In this context, Chowdhury et al. (2020) suggested that increasing online infrastructure could be an effective strategy for increasing businesses. In the online commerce environment, consumers' trust, satisfaction, and commitment are considered major factors influencing loyalty (Faraoni et al., 2019). Therefore, the utilised online technologies should enhance consumers' trust, satisfaction, and commitment towards a brand. Online technologies such as eCommerce and social commerce are a few prominent tools utilised by the companies to build consumers' loyalty, trust, and relationships by increasing 'users' social presence of interaction.

eCommerce can be advantageous for food and industry in various aspects. Challenges in the food and beverage industry such as meeting consumer demands and expectations, managing supply chains, achieving competitive advantage can be leveraged by adopting eCommerce. Features of eCommerce such as real-time tracking, online product information, user-friendly interface for online ordering, low-costs, reduced intermediaries, integration of social media for effective interaction by improved engagement and social presence of users etc. coupled with improved efficiency of supply chain strategies such as same-day deliveries has led to the growing adoption of eCommerce in food and beverage industry (Cristobal-Fransi et al., 2020). However, uneven growth can be observed in the adoption of eCommerce in the food and beverage industry. Depending on the influence of these barriers, eCommerce's adoption may vary across different regions. However, it is interesting to note that social media and internet technologies have been rapidly increasing in the past few years. Currently, there are 4.14 billion active social media and internet users across the world, indicating more than half of the world's population having access to the internet (Clement, 2020a; Clement, 2020b).
Recognising the changing preferences of the people, many companies are adopting eCommerce strategies to achieve sustainable growth. However, successful adoption can be influenced by various factors. For instance, it is identified that the online experience and visual attractiveness of the online platform influence the eTrust of the users, which in turn influences eLoyalty (Lin & Sun, 2009).

Similarly, Faroni et al. (2019) identified that website characteristics as the antecedents of eLoyalty. Therefore, it can be understood that there are few common antecedents for both eTrust and eLoyalty in the food and beverage industry, and common influencing features such as experience, users' preferences can be improved by integrating social media technologies with eCommerce. Users' preferences would greatly influence the use of eCommerce in the food industry (Okumus et al., 2018). Other factors such as ease of use, service quality, eSatisfaction (Lin et al., 2019); and perceived justice, emotions, and behavioural intentions (Hajli et al., 2015; Ortiz et al., 2017) are identified to be influencing users engagement on online commerce platforms and purchase intentions. As mentioned earlier, social media may improve these factors by engaging users with effective interactive features, resulting in improved social presence, which may influence eTrust and eLoyalty.

Social media has empowered consumers by improving access to information, which led to the companies shifting their focus towards consumer-centric business. Social media facilitates consumers' online social presence where they interact with brands and other consumers, have access to rich information about products and services, and share their opinions and feedback. As a result, it is considered a tool for knowledge creation processes that mainly include socialisation, externalisation, combination and internalisation, and innovation (Papa et al., 2018). As a result of increased knowledge, consumers can make effective decisions in relation to purchases in the food and beverage industry. However, social media's impact on consumers' behaviour can be either positive or negative depending on the quality of social
interaction and other factors being considered. For instance, Simeone & Scarpato (2020) conducted a study on consumers' food choices in Italy and identified that information accessed from social media positively affected the adoption of non-sustainable food behaviour. In a similar context, Lee (2016) identified that information such as social commerce deals led to high satisfaction and repurchase intentions among the hotel industry consumers as they found deals to be providing good value for money. Therefore, social media can have both positive and negative impacts on both businesses and consumers. However, social media can greatly empower consumers by increasing their knowledge and helping them in making the right choices. For example, social media elements enable consumers to share information and help others solve product-related problems, which can increase the social value (perceived benefits of enhancing customer's social well-being and relationships); and be beneficial for both consumers and businesses (Sree & Sengottuvelu, 2020). In this context, social media's significance is realised in increasing brand awareness, access to information for consumers, access to feedback, and using it as a medium for interaction with consumers by the businesses, which can help improve customer relationships and retention (Konuk, 2019). In addition, the user-generated content on social media platforms is positively correlated with brand trust and purchase intentions (Nyein, 2019). It can be observed that there is a huge amount of research underwent in linking social media and brand trust (Haciyakupoglu & Zhang, 2015) than the impact of trust in social media and its impact on brand loyalty (Warner-Soderholm, 2018). Trust in social media may influence consumers' attitudes towards brand loyalty. As a result, various strategies have emerged for making the effective and efficient use of social media applications. In this context, few social media strategies in the food and beverage industry, including maintaining consistency, investing in the storyboard, partnering with influencers, and creating and sharing worthy content. Similarly, social media features such as community and conversation are important factors in
social commerce (Tajvidi et al., 2017). All these factors result from the consumer's participation in social media or social presence.

### 2.1.3 Research model and hypotheses

Social presence is the feeling of being with a real person in a virtual or online environment (Lu et al., 2016). It is defined as a subjective experience of actually being in a mediated online interactive environment (Lu et al., 2016). Therefore, the level of access to the information and interactivity are the two major components that define the extent of social presence on a platform. Social presence is understood and used in the research from perspectives. For instance, it is analysed that different media have different abilities in reproducing rich social information (ex. feedback), reflecting the perspective that some media is more effective than others for social presence (Lu et al., 2016). In addition, according to information processing theory, it is identified that communication environments, which provides verbal and non-verbal communication modes, could produce an equal level of intimacy as face to face communication, indicating a greater level of social presence (Biocca, 1999; Patterson, 2017). From these two theories, social presence in this study is conceptualised as the experience of interacting and engaging in an online commerce platform that is integrated with social media technologies.

Social presence can be analysed based on the ease of communication and interaction among the users. From the companies perspective, providing information of interest to the users and creating dialogic loops and the affective and cohesive strategies for projecting social presence can effectively enhance users' engagement (Linjuan et al., 2018). Therefore, though there is a social presence, the quality of interaction between all users, including the sellers and buyers, influences the users' engagement or buyers. The more effective the sociable environment, the more effective would be the social presence (Weidlich & Bastiaens, 2019); therefore, a social
presence can be one of the primary antecedents for trust. Social commerce constructs may impact both cognitive and affective social interactions. For instance, social support on the commerce platform may lead to closeness and engagement of users. In addition, social presence and informational support may impact consumer trust beliefs (Li, 2019). Therefore, trust in social media is an important factor that may be influenced by social presence. In a similar context, Tseng et al. (2019) identified that factors contributing to media richness such as instant feedback and personal focus could lead to social presence and increase loyalty to social media platforms such as Mobile Instant Messaging. Accordingly, various studies have identified positive correlations between social presence and trust in online exchanging relationships and purchase intentions (Lu et al., 2016; Richardson et al., 2017; Chong et al., 2018). However, the consideration of trust dimension varied among these studies which included trust in media, trust in the brand, trust in information, trust in other users etc. Hajli (2014) identified that social media improves interaction on the commerce platform and positively impacts developing trust. In addition, Web 2.0 technologies integrated with social media technologies can enhance the interactions on the eCommerce platforms, which can significantly impact users' trust and purchase intentions (Hajli, 2015). However, it may be possible that social presence can lead to trust in social media, as the increase in the social presence may help users access rich information and help make effective decisions. As a result, the users may trust in social media with an increase in social presence. Focusing on these aspects, the following first hypothesis is formulated.

\[ H1: \text{Social presence of interaction has a positive effect on trust in social media}, \]

As discussed in the previous section, social presence enhances user interaction with sellers and other users, which can impact consumer brand engagement. In addition, social brand
engagement is moderated by firm generated content, which can also influence the social presence (interaction), and loyalty attributes such as the intention to use the brand and engage in e-WoM (Kofi & Graeme, 2018). It can be observed that brand engagement is moderated by social media and website characteristics, which are also the factors influencing social presence; thus, they can contribute to brand Loyalty. Accordingly, Pongpaew et al. (2017), in a study on the Facebook Commerce page, identified that both consumer brand engagement and social presence have a positive impact on trust and loyalty; and highlighted the need for focus on the nature of brand community various social media platforms. Social support and community factors on social media platform may increase customer engagement, which in turn enhances the loyalty factors such as brand value co-creation (Tajvidi et al., 2017; Tajvidi et al., 2018), stickiness, eWOM, and repurchase intentions (Hajli et al., 2017a; Molinillo et al., 2020).

In contrast to these findings, Nadeem et al. (2020) identified that trust in social commerce mediates the relationship between social presence and commitment and loyalty in social commerce online brand communities. However, loyalty may be influenced by other factors. For example, consumers may shift their loyalty to save money by buying products at low cost; or shifting to other brands offering high-quality products at premium prices. This variety-seeking behaviour may impact the loyalty of the consumers and also affects their social presence on a platform. In this context, Sheorey et al. (2014) identified that this variety-seeking behaviour may significantly impact social presence and loyalty and may vary according to demographic factors such as age, income, and experience. There is a need to understand the relationship between loyalty, trust, and social presence in more detail, as there is a large number of studies that have interlinked these factors in analysing various features of social media and user behaviour. Accordingly, the following hypothesis is formulated, which considers two variables, including social presence and loyalty.
Trust in eCommerce and social commerce can be identified from two different contexts in research studies: trust in brand or dealers; and trust in social media. It is identified that individual vendors trust has no significant effect on users' engagement on platforms, but customer loyalty can be accumulated by individual vendors trust. In contrast, trust in social media can significantly affect purchasing behaviour, user's attitudes, and intention to buy (Yeon et al., 2019). Similarly, Yahia et al. (2018) observed that platform perceived usage increases social commerce activities and identified that social interactions with the vendor and product differentiation decrease trust. Hajli et al. (2014) analysed that social word of mouth constructs such as ratings, reviews, referrals, recommendations, forums and communities can positively influence new products' trust. Further analysing the concept of trust, both online brand communities trust (social media) and brand trust have a positive impact on the aspects of loyalty such as e-WoM, repurchase intentions; however, brand trust is found to be having more impact than online brand communities trust (Hajli et al., 2017a; Tajvidi et al., 2018). It can be observed that previous studies mostly focused on the vendors' trust rather than trust in social media.

Moreover, trust in social media is identified as having a significant impact on users' purchase behaviour and attitudes rather than on their loyalty. However, their purchase behaviours and attitudes towards the vendor can be used to analyse loyalty. Social support and customer review quality are the two factors that are identified to positively impact trust in social commerce, which can influence purchase intentions (Lin et al., 2019). In addition, reputation and price advantage are found to have the strongest influence on trust. Developing trust in social media is challenging in the current times than ever before. Rising online incivility has
made online social interaction hostile to many users (Nadeem et al., 2019). Also, concerns over privacy and security are other factors that greatly influence the users' trust in social media. However, various factors may support the development of trust in social media. For instance, Shareef et al. (2020) identified that factors including fulfilled expectations, predictability, familiarity, monitor, and norms could influence social media trust formation. It is also identified in the previous section that satisfaction could positively impact trust. In this context, Nisar & Whitehead (2016) identified that satisfaction emerging from social media interactions could enhance users' behavioural loyalty, reflecting the indirect influence of trust in social media on brand loyalty.

Trust has been examined as mediators across various studies. For instance, previous literature indicates the role of trust as the mediator between the social presence of interaction and Loyalty (Nevzat et al., 2016; Mainardes & Cardoso, 2019; Ozdemir et al., 2020). However, there is a lack of research on identifying the direct influence of trust in social media on loyalty towards the brand. Focusing on these aspects, the following hypothesis is formulated.

\[ H_3: \text{Trust mediate the effect of social presence of interaction on loyalty} \]

2.2 Control variable

We also extend the general model by identifying the control variable. There is still no consensus on how demographic variables affect the loyalty of costumer to social commerce website. Therefore, we selected age as a control variable on loyalty. This study contributes to understanding whether and how the effects of loyalty determinants differ across age.
Fig. 1. Research Model

**Control Factor: Age**

The study model based on the formulated hypothesis is presented in figure 1.

3. **Research method**

Quantitative research quantifies a research problem by generating numerical data related to the various variables related to the problem, which can be analysed and transformed into usable statistics for generating meaningful outcomes. Quantitative research is an effective approach for generalising the findings over a large population and identifying the relationship between the variables (Saunders et al., 2019). This study adopts the correlational research design, which attempts to determine the relationship between two or more variables using statistical data. Three variables are included in the study, as shown in figure 1, and the data related to these variables are collected using a survey questionnaire.
The suggested model of the study was tested via partial least squares (PLS). Partial least squares is a multivariate analytic technique mainly used for path analytic modelling with latent variables (Baron & Kenny, 1986). The PLS can be used to test hypotheses. In addition, it shows where correlations may or may not exist and make recommendations for subsequent testing (Chin, 1998). PLS has been widely used in Marketing and management studies such as in the work of (Shanmugam, Sun, Amidi, Khani, & Khani, 2016), first because PLS able to analyse both reflective and formative latent constructs and second PLS able to deal with small sample sizes without normalising the data.

Firstly, unlike other methods such as SEM which requires a larger sample, PLS. can be effective for analysing data with lower samples, as it uses a different algorithm to compute solutions involving principal component analysis rather than maximum likelihood factor analysis that allows solutions to be reached with far smaller sample sizes (Shackman, 2013). Secondly, PLS requires no distributional assumptions, whereas other methods like SEM assumes normal distribution for the data; and PLS. can use both reflective and formative scales, whereas other methods use mostly reflective scales (Shackman, 2013).

4. Results

In this section, we report the results.

4.1. Measurement model analysis

The measurement model, specifically its instrument items, are tested for reliability and validity. The reliability test entails an assessment of internal consistency, whilst the validity test entails evaluating the instrument items convergent and discriminant validity (Chin, Marcolin, & Newsted, 2003). In terms of internal consistency, evaluation is carried out by determining each 'dimension's composite reliability and 'Cronbach's Alpha values. Regarding convergent validity, the measurement is based on the value of the Average Variance Extracted (AVE) for
each construct (Fornell & Larcker, 1981). Meanwhile, the measurement for discriminant validity is based on the cross-loading matrix and the AVE square root (Fornell & Larcker, 1981).

Firstly, reliability testing was carried out on all the 'constructs' measurement items, i.e. by determining their respective 'Cronbach's alpha coefficients. The findings revealed that the average 'Cronbach's alpha for all the constructs (i.e. ranging from 0.775 to 0.878) was higher than the proposed threshold of 0.60, thus confirming adequate reliability for all the constructs. Next, the internal consistency of the constructs was determined by assessing the composite reliability and average variance extracted (AVE) of each. A composite reliability value of more than .70 confirms the 'indicators' internal consistency. The findings of this study revealed that the Composite Reliability (CR) values for the constructs were higher than 0.7 (i.e. between 0.857 and 0.913), hence confirming adequate internal consistency (Chin, 1998; Chin et al., 2003).

Meanwhile, the AVE values of all the constructs (i.e. between 0.600 and 0.778) were higher than the proposed threshold of 0.5 (Bagozzi & Yi, 1988), thus confirming adequate convergent validity. Table 1 presents the analysis results for all the 'items' factor loading values (i.e. ranging between 0.683 and 0.921) which are beyond the threshold value of 0.6, hence confirming that the items are statistically significant and acceptable (Hair, 2010). In sum, the measurement model is confirmed to have high convergent validity.
Table 1: Convergent validity for the measurement model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor loading</th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOY</td>
<td>LOY1</td>
<td>0.822</td>
<td>0.878</td>
<td>0.911</td>
<td>0.673</td>
</tr>
<tr>
<td></td>
<td>LOY2</td>
<td>0.865</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LOY3</td>
<td>0.841</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LOY4</td>
<td>0.847</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LOY5</td>
<td>0.718</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SP</td>
<td>SPI1</td>
<td>0.791</td>
<td>0.775</td>
<td>0.857</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>SPI2</td>
<td>0.763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPI3</td>
<td>0.853</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPI4</td>
<td>0.683</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>TRSM1</td>
<td>0.908</td>
<td>0.856</td>
<td>0.913</td>
<td>0.778</td>
</tr>
<tr>
<td></td>
<td>TRSM2</td>
<td>0.921</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TRSM3</td>
<td>0.812</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* All factor loadings of the individual items are statistically significant $p < .001$

Table 2 presents the results of the 'constructs' discriminant validity which was individually tested by comparing the average variance extracted (AVE) and the 'constructs' inter-correlation. It was revealed that the AVEs for the latent constructs which were measured by reflective indicators, were higher than the proposed threshold of 0.5. Compared to its correlations with other constructs, each construct demonstrated a greater AVE square root. The results of these measurements are acceptable, thus indicating sufficient discriminant validity for all the constructs. In sum, the measurement 'model's reliability, convergent validity and discriminant validity are adequately confirmed.
Table 2: Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>Factor loading</th>
<th>Social Presence of Interaction</th>
<th>Trust in Social Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Presence of Interaction</td>
<td>0.774</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in Social Media</td>
<td>0.653</td>
<td>0.753</td>
<td></td>
</tr>
</tbody>
</table>

4.2 Structural model and hypothesis testing

The next stage is testing the structural model (Hair et al., 2014), entailing analysis of the model's predictive capabilities and the 'constructs' interrelationships. In PLS-SEM, the structural model is analysed by determining the significance of the path coefficients, the level of the $R^2$ values and the predictive relevance ($Q^2$), as well as the $f^2$ effect size. Hypothesis testing was performed using PLS, specifically the bootstrapping procedure. Figure 2 lists down the standardised path coefficients ($\beta$) and $t$ values, the significance of the path, and the R2 values for the endogenous constructs.
The structural model was measured using the coefficient of determination ($R^2$) value entailing the model's predictive accuracy denoted as the squared correlation between the actual and predicted values of a specific endogenous construct. The results revealed that loyalty has an $R^2$ value of 0.458, whilst Trust in Social Media has an $R^2$ value of 0.374. The predictive relevance of the proposed model was evaluated using the blindfolding method and the cross-validated redundancy method (Stone-'Geisser's $Q^2$ value). Based on the results, loyalty has a $Q^2$ value of 0.301, whilst Trust in Social Media has a $Q^2$ value of 0.290. All the $Q^2$ values are larger than the proposed threshold value of zero, thus confirming the model's predictive relevance for the constructs.
Table 3: Results of $R^2$ and $Q^2$ Values in the model

<table>
<thead>
<tr>
<th></th>
<th>$R^2$ Square Adjusted</th>
<th>$Q^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty</td>
<td>0.458</td>
<td>0.301</td>
</tr>
<tr>
<td>Trust in Social Media</td>
<td>0.374</td>
<td>0.290</td>
</tr>
</tbody>
</table>

The guidelines introduced by Cohen (1988) state that $f^2 \geq 0.02$ denotes a small effect size, $f^2 \geq 0.15$ a medium effect size, and $f^2 \geq 0.35$ a large effect size. As shown in Table 4, the social presence of interaction has a medium effect size whilst trust in social media has a large effect size.

Table 4: Results of effect size $f^2$

<table>
<thead>
<tr>
<th></th>
<th>Loyalty</th>
<th>Trust in Social Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Presence <em>of Interaction</em></td>
<td>Medium 0.232</td>
<td>0.606 Large</td>
</tr>
<tr>
<td>Trust in Social Media</td>
<td>small 0.101</td>
<td></td>
</tr>
</tbody>
</table>

The next test entails determining the statistical significance of the 'constructs' path coefficient based on t-tests and p-value. As shown in Table 5, the path correlations between all the variables are statistically significant. The results for the 'direct 'effect' of Social Presence of Interaction on Loyalty (H1) as "mediated' by the trust (H2 and H3) revealed that the three hypotheses were supported. Table 5 summarises the results obtained in relation to the research hypotheses. The result of the bootstrapping method after introducing the mediator construct (trust) in the model showed the effect of Social Presence of Interaction on Trust in Social Media. It was revealed that there is a direct, positive and significant relationship between Social Presence of Interaction and Trust in Social Media (H1: $\beta=0.614$, $p<0.001$ t value =11.106); thus, hypothesis H1 is supported. The finding also revealed that Trust in Social Media has a positive
effect on Loyalty (H2: $\beta=0.297$, t value =4.188, P Value=<0.001). Additionally, Social Presence of Interaction was also revealed to have a positive and significant effect on Loyalty (H3: $\beta=0.455$, t value =6.606, P Value=<0.001). As shown in Table 6, Trust in Social Media plays a partial mediating role in the link between Social Presence of Interaction and Loyalty.

**Table 5: Path coefficient**

<table>
<thead>
<tr>
<th>Path</th>
<th>$\beta$</th>
<th>SE</th>
<th>t value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Path a (IV to mediator)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Presence of Interaction $\rightarrow$ Trust in Social Media</td>
<td>0.614</td>
<td>0.055</td>
<td>11.106</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Path b (Mediator to DV)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust in Social Media $\rightarrow$ Loyalty</td>
<td>0.297</td>
<td>0.071</td>
<td>4.188</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>Path 'c' (Direct effect of IV to DV)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Presence of Interaction $\rightarrow$ Loyalty</td>
<td>0.455</td>
<td>0.069</td>
<td>6.606</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 6 presents the results of the comparison between the total effects and the direct effects. Social Presence of Interaction is indicated to pose a significant direct effect and total effect on Loyalty via Trust in Social Media, hence supporting the hypothesis that Trust in Social Media poses a partial mediating effect in the relationship between Social Presence of Interaction and Loyalty.
Table 6: Test of Mediation

<table>
<thead>
<tr>
<th>Path</th>
<th>Total effect</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Presence of Interaction -&gt;</td>
<td>0.638</td>
<td>0.455</td>
<td>0.182</td>
<td>Partially</td>
</tr>
<tr>
<td>Loyalty</td>
<td>(P&lt;0.001)</td>
<td>(P&lt;0.001)</td>
<td>(P=0.001)</td>
<td>Mediation</td>
</tr>
</tbody>
</table>

The effects of the control variable are also examined to prove the stability of the model. The control variable of gender was included in the model, together with the main effects construct in order to determine whether the theoretical models are independent of these control variables. As shown in Figure 2, the significant main effects remain significant with similar t-values as before. The control variables had no significant impact on loyalty. After including the control variables, the R2 for the dependent variable did not change. Thus, the inclusion of the control variables did not significantly increase the variance explained. Based on the above test results, it can be concluded that the results of the hypotheses testing are independent of the control variables and that the model is stable and independent of the control variables.

5. Discussion

The current study contributes a model that gives several remarkable insights on the effect of Social Presence and Trust in Social Media on Customer Loyalty in the context of online shopping in the UK. The study unequivocally elucidates how social presence and trust affect customer loyalty. Meanwhile, trust is revealed to mediate the link between social presence and loyalty.

The positive effect of social presence on trust as revealed in this study is justified in relation to social media and is consistent with past findings (Anderson & Srinivasan, 2003; Cyr, Hassanein, Head, & Ivanov, 2007; Lu, Fan, & Zhou, 2016; Nadeem et al., 2020). Mäntymäki
and Salo (2010) revealed the effect of social presence on customer loyalty. Implications wise, the findings could be beneficial for social commerce websites in retaining customer loyalty. The customers of social commerce websites favour elements of social presence in the website which would enable mutual interactions and message sharing.

This indicates that, similar to e-commerce websites, social presence also helps customer loyalty retention for social commerce websites. Hence, the elements of social interaction in social commerce websites can drive customer loyalty as customers favour communicating via social commerce and value the sharing of suggestions and information to others. Social commerce websites can offer the advantage of customer accessibility via social presence features. Customer interactions should be kept and shown on the website as a value-added feature for new customers searching for quick feedbacks about the website that can eventually transform them into loyal customers. Trust is a key element for minimising uncertainties and risks in website settings, leading to customer loyalty. According to Lu et al. (2016), a person can be influenced by the past experiences of individuals that they know and trust. Meanwhile, Godes et al. (2005) asserted that social interaction among web users could influence their level of loyalty as customers.

The findings of this study reveal that social presence is positively correlated to customer trust in and loyalty to a given social commerce website. This result is also consistent with the findings of earlier studies. Gefen, Karahanna, and Straub (2003) demonstrated in their study that a high perception of social presence can lead to the creation of trust. Likewise, Hajli (2015); Mäntymäki and Salo (2010) indicated the positive effect of social presence on the formation of trust. The feature of social presence decreasing the gap between consumer and seller makes an encouraging environment for building trust in the exchange (Lu et al., 2016).
Specifically, customer trust poses a significant effect on customer loyalty in the context of social commerce websites. Customer trust is highly crucial in ensuring long-term customer retention for online shopping sites. With the establishment of a high trust level in the service quality of a certain social commerce website, there is a higher likelihood for customers to repurchase from that website.

The current findings may be beneficial for the managers of social commerce websites in maintaining customer loyalty. For instance, trust is indicated as a crucial factor in driving customer loyalty and, subsequently, business sustainability. Hence, the social commerce site managers can use this finding to develop strategies for building customer trust and, ultimately, customer loyalty.

The finding also indicated the partial mediating effect of customer trust in the relationship between social media presence and customer loyalty. Resultantly, social presence as mediated by trust leads to the positive formation of customer loyalty. This is consistent with the findings of (Nadeem et al., 2020). In sum, customer loyalty can be promoted by strengthening trust via the creation of observable indicators of trust and social presence.

eCommerce and social media technologies can significantly benefit the food and beverage industry in reducing costs and streamlining supply activities, and most importantly, by engaging users in active interaction and enhancing social presence. We develop empirical research to explain the impact of social presence interaction and trust in loyalty. Our findings confirm the previous findings that the enhanced social presence of interaction can positively impact users' trust and Loyalty (Faroni et al., 2019). The results of our survey also confirm that social media can improve users' knowledge through information sharing, similar to the previous research (Papa et al., 2018; Sree & Sengottuvelu, 2020) which can positively impact users' trust in social media (Nyein, 2019). Previous research (Lu et al., 2016; Richardson et
al., 2017; Chong et al., 2018) have identified positive correlations between social presence and trust factor on online commerce platforms, influencing Loyalty (Tseng et al., 2019). This has been confirmed in our research. Relationship between social presence and loyalty are mostly analysed using loyalty attributes such as e-WoM, satisfaction, purchase and repurchase intentions etc. (Molinillo et al., 2020; Kofi & Graeme, 2018). Also, trust in social media is positively correlated with various loyalty factors and found to be playing a mediating role between the social presence of interaction and Loyalty (Nevzat et al., 2016; Mainardes & Cardoso, 2019; Ozdemir et al., 2020).

4. The theoretical and practical contribution

The theoretical contribution of this research is to examine the impact of social presence and trust in loyalty in the food and beverage industry. The practical contribution of this research is to provide some practical knowledge to the food and beverage industry to enhance loyalty in their e-commerce platforms. Our finding provides a framework for the food and beverage industry to enhance social presence and trust in e-commerce platforms to enhance loyalty. Our finding contributes to the food and beverage industry, particularly in the COVID-19 era, as more consumers are buying through e-commerce platforms.

5. Limitations and future research direction

Our research has some limitations. First, data needs to be from other countries to examine customers in another cultural setting to provide better options to generalise the findings. Therefore, a future research avenue is to test this model in different countries. Second, our study has only quantitative data. A future research direction is to collect data through interview and focus group. Third, we could not have data from the COVID-19 era to see what consumers think during this time. A new research direction is to examine the current situation by collecting data from online shoppers.
References


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