The role of product presentation factors in product evaluation and online food delivery partners

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Abstract
Online Food Delivery Services (OFDS) platforms are growing rapidly in Indonesia. However, when compared to neighboring countries such as Malaysia, OFDS user penetration in Indonesia is still very minimal despite the high level of user consumption. The level of user penetration is directly related to customer retention, where product presentation is an important part of customer retention. Previous studies focusing on product presentation factors are still rare. The product presentation factors studied in this research include the combination of product color and background, social presence, and calorie information. These three factors can be directly managed by restaurant partners and have been proven to be important in previous studies related to their relationship with product evaluation. This study uses an experimental design and Structural Evaluation Modeling (SEM) approach. A total of 240 respondents participated in this study. Of the eight hypotheses, four were accepted. Social presence and calorie information were found to significantly affect product attitude negatively. In addition, product attitude ($\beta = 0.733$, $p = 0.001$) and brand trust ($\beta = 0.338$, $p = 0.001$) had a significant positive effect on purchase intention. The discussion and managerial implications are further discussed in this study.

Keywords*: OFDS, product presentation factors, product evaluation, SEM, experimental design.*

Introduction

Online Food Delivery Services (OFDS) can be defined as any food delivery transaction involving monetary value conducted through portable devices such as smartphones or tablet computers (Yeo, Goh, & Rezaei, 2017). OFDS can be divided into two types, namely restaurant-to-consumer or platform-to-consumer (Li, Mirosa, & Bremer, 2020). In Indonesia, the restaurant-to-consumer mode has a long-standing historical precedent dating back to the early 2000s, pioneered by telephonic services such as Pizza Hut Delivery (1500-600), KFC (14022), and McDonald's (14045). While these services established the concept of food delivery, they were not yet considered OFDS as they lacked the crucial component of internet connectivity. This system eventually modernized by integrating internet technology into its pre-existing operations, transforming into the OFDS format recognized today. Prominent examples of this evolution include the dedicated apps and websites for McDelivery, Pizza Hut Delivery (PHD), and Domino's Online Delivery.

Unlike the restaurant-to-consumer OFDS mode, which is a long-established method of food delivery that has evolved with its integration with the internet, the platform-to-consumer OFDS mode can be seen as a recent innovation that is gaining momentum. This momentum is related to the massive spread of smart devices, economic prosperity, and the population's need for convenience. The novelty and potential of platform-to-consumer OFDS, as well as its much larger market share (a simple comparison of the number of

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McDelivery and Gojek app installations shows a ratio of 1:100 Google (2022a, 2022b), makes this research more interested in this mode.

Indonesia's OFDS revenue reached 0.077% of Indonesia's total Gross Domestic Product (GDP). When compared to neighboring countries such as Malaysia, this percentage is not too different, with Malaysia's OFDS revenue percentage compared to its GDP being 0.085% (The World Bank, 2019). However, the user penetration rates of the two countries are quite different. Malaysia achieved a user penetration of 24.8%, while Indonesia only reached 6.5% in 2021 (Statista Digital Market Outlook, 2020). This indicates that the coverage of OFDS users in Indonesia is still very small compared to Malaysia. Therefore, the level of food consumption and the importance of product presentation factors in relation to user penetration in OFDS become opportunities for restaurant partners and OFDS platforms to continue developing their products and platforms.

Not only commercial aspects are of concern in the world of OFDS platforms, but several of the most popular studies also related to OFDS in the world in the scope of marketing include studies on usage intentions, loyalty, and behavioral intentions of OFDS customers. The above studies found various interesting findings, such as how factors such as privacy and security are important factors in predicting behavioral intention (Chai & Yat, 2019; Suhartanto, Helmi Ali, Tan, Sjahroeddin, & Kusdibyo, 2019). Performance expectancy and congruity with self-image were also found to be highly influential on OFDS usage intention (Gunden, Morosan, & DeFranco, 2020). Findings related to e-service quality and its relationship with loyalty Suhartanto et al. (2019) suggest that restaurants should provide the best electronic services (descriptions, images, price clarity) in OFDS; the principle of providing the best service is, of course, a basic principle of business and marketing.

This study uses a research model with an experimental design. The experimental design research model can provide a more concrete practical picture for OFDS business managers, in addition to utilizing theoretical models to further develop the practical picture that will be found. Research with an experimental design, in the context of psychology and behavior, is a process carried out to test a hypothesis that certain behavior will occur in a condition or situation that can be specified (Myers & Hansen, 2011). The specific behavior in the context of this study is user evaluation of OFDS products and restaurant partners, which is often represented by the variables of attitude and trust. By manipulating certain conditions, OFDS business managers can try to replicate these same conditions in order to increase the attitude and trust of their customers.

Based on the results of research by Sasmito (2018), user experience or customer experience on the application greatly influences the increase in interest or attractiveness of using OFDS. The customer experience when using OFDS can be influenced by six assessments, namely attractiveness, efficiency, perspicuity (clarity), dependability (accuracy), stimulation, and novelty. In this study, the focus of customer experience refers to the measurement of attractiveness, perspicuity (clarity), dependability (accuracy), and stimulation. In order for someone to be attracted to the visual quality of an interface, a design that conveys information well and beautifully is needed (Blair-Early & Zender, 2008). In an offline context, the visual presentation of a product depends on several things, such as product design, store decoration, and product arrangement. In an online context, store decoration and product arrangement are closely related to the algorithms used by platform providers (Li, Wang, & Chen, 2014).

Previous studies have found a significant relationship between user experience and media type on customer retention. These two findings are relevant because product presentation is a form of both user experience and media type (Deng, Turner, Gehling, & Prince, 2010; You & Joshi, 2020). Referring to Grab and Gojek, the two largest OFDS in Indonesia, several product elements that can be adjusted by partners are as follows: product photos, product descriptions, product prices, product categories, and product variants (Gojek, 2021; Grab, 2019). Of these five elements, the most important element is product photos. It has been previously found that the aesthetic aspects of a product can influence various factors that are important for predicting purchase interest. Furthermore, product photos can create visual or real cues to help users understand the product (Laroche, Yang, McDougall, & Bergeron, 2005).

The importance of color combination and social presence cannot only be seen from the perspective of platform feature limitations. Product color aspects are very important, especially in the context of the food industry where color determines various aspects of food such as taste, freshness, and ripeness (Garber Jr, Hyatt, & Starr Jr, 2000). Social presence itself is closely related to a person's psychological connection, where the connection or warmth that a person feels towards a medium can come from a sense of contact with other humans, friendliness, and sensitivity (Rice & Case, 1983; Steinfield, 1986; Y. Yoo & Alavi, 2001). In addition to product photos, additional information is also important in product presentation. This is because in search engine competition for the context of online buying and selling, the space provided by the platform is limited (Wu et al., 2016). In the context of OFDS, food searches only produce information such as product name, product price, and product photos. In Indonesia, additional information about products is very important to convince customers that the products being sold are trustworthy, help assess the benefits to be gained, and assess the risks of the products being sold so that customers can determine whether or not to buy the product (Kartono & Tjahjadi, 2021). One of the most important pieces of information, considering the trend toward healthy eating and how this information can also be an obligation for partners and platforms, is calorie information (Bates, Reeve, & Trevena, 2020; Gregory, McTyre, & DiPietro, 2006).

Of the three product presentation variables described above, all can be directly observed and manipulated. Examining the relationship between product evaluation and purchase intention is important, especially in the context of online shopping, which is considered more risky by prospective buyers (Yeo, Goh, & Rezaei, 2017). Therefore, the product presentation factors that are the focus of this study are the combination of product color and background, social presence, and calorie information. Furthermore, the influence of attitude and trust on purchase intention will be examined using SEM with the aim of confirming the relationship between latent variables. The relationship between certain conditions and their influence on OFDS product evaluation, as well as the confirmation of the latent relationship, then becomes the focus of this study.

This study offers practical value for restaurant partners, OFDS platform managers, and academics by providing evidence on which product presentation conditions shape consumers' product attitudes and trust toward restaurant partners in OFDS. By identifying the specific factors that influence these two evaluations, restaurant partners and platform managers can make more informed decisions when designing menus, visuals, and information cues, and when setting platform-level presentation standards. In turn, these

insights can help improve the effectiveness and productivity of OFDS transactions and, at a broader level, support the continued growth of Indonesia's digital food delivery ecosystem, which contributes to the national economy.

Literature Review

In the Online Food Delivery Services (OFDS) platform, user interaction with products is entirely dependent on visual presentation, particularly product photos and additional information, as there is no direct physical experience. Unlike offline contexts that rely on product design, store decoration, and layout, in OFDS, it is the seller partners who determine the appearance of products through elements such as photos, descriptions, prices, categories, and variants (Gojek, 2021; Grab, 2019). Product photos play an important role as visual cues that help users understand and form expectations about products, which in turn influence their interest in purchasing (Laroche et al., 2005). In addition to photos, additional information such as promotions or product features is often inserted directly into the visual display due to limited information space on the platform. Among these additional details, calorie information is particularly relevant: it supports transparency and consumer trust while addressing public health concerns.

Product photos are not a one-dimensional aspect; various studies have identified a number of visual factors such as media richness Appiah (2006), the use of original photos versus stock photos (Heide et al., 2013), contextual backgrounds (Maier & Dost, 2018), and 3D displays (Ya & Xing, 2021) that have been proven to influence consumer perceptions and behavior. However, not all of these findings can be directly applied in the context of Online Food Delivery Services (OFDS) due to platform feature limitations. For instance, 3D product displays are not yet available on OFDS platforms, and the use of generic stock photos remains uncommon in this context, as restaurant partners typically upload their own product images (Grab, 2019). Unlike offline settings where product evaluation relies on physical cues such as store decoration and product arrangement, OFDS users interact with products entirely through visual presentation—primarily product photos and supplementary textual information (Li, Wang, & Chen, 2014). This creates an information asymmetry in which sellers face challenges in credibly conveying product quality, while buyers have limited means to evaluate products prior to purchase (Ba, Whinston, & Zhang, 1999). Consequently, product photos serve as the primary medium for bridging this information gap, functioning through two key effectiveness indicators: actual knowledge, referring to how well customers genuinely understand product information, and diagnosticity, referring to how effectively the platform helps users evaluate a product (Jiang & Benbasat, 2007). The importance of visual presentation is further amplified in the food industry, where color determines critical perceptions such as taste, freshness, and ripeness Starr Jr et al. (2000), and where 62–90 percent of a person's initial assessment within the first 90 seconds is based on color alone (Singh, 2006). Moreover, the limited display space provided by OFDS platforms—where search results typically show only the product name, price, and photo—compels restaurant partners to embed additional information, such as promotional messages or nutritional details, directly into product images (Wu et al., 2016). This constraint makes a deeper understanding of visual and informational aspects of product photos highly valuable for both OFDS platforms and restaurant partners. Therefore, this study focuses on two main dimensions of product photos on OFDS, namely the

combination of product color with background and social presence. These two dimensions were chosen because there are no restrictions such as technology and platform regulations that would prevent their investigation, unlike 3D product displays or multi-product photo arrangements (Grab, 2019). In the study by Huang et al. (2020), different combinations of product colors and background colors resulted in better product evaluations (for sensory-social products). The product evaluation referred to in the study by Huang et al. (2020) was measured using attitude indicators. However, several studies have found that congruent or similar color combinations significantly increase user trust and attitude (Sasidharan, 2010; Youn, Shin, & Lee, 2016).

On the other hand, social presence is one of the most important aspects in communication science, especially related to the use of a communication medium where there is interaction between humans and computers (Oh, Bailenson, & Welch, 2018; Tantri, 2018). This definition is closely related to a person's psychological connection, where the connection or warmth that a person feels towards a medium can come from a sense of contact with other humans, friendliness, and sensitivity (Rice & Case, 1983; Steinfield, 1986; Yoo & Alavi, 2001). Zhou et al. (2016) found that social presence has a strong and significant direct influence on trust in sellers, where trust in sellers mediates the relationship with purchase intention in the case of an e-commerce site in China. Cui et al. (2010) found that both aspects of social presence (cognitive and affective) positively and significantly influence the attitude of customers of a fictional mobile phone buying and selling website. In addition, Hassanein and Head (2007) found that a higher level of social presence positively and significantly influences the attitude and trust of users of a fictional clothing buying and selling website.

However, the negative influence of social presence has also been found by several previous studies (Gao, Rong, Tian, & Yao, 2021; Liew, Tan, & Ismail, 2017). Therefore, the relationship between social presence and attitude and trust, which are product evaluation factors, especially in the context of OFDS, is also a major question in this study. In addition to visual aspects, calorie information is a critical element in product presentation. The relationship between calorie information and trust and attitude may arise because the presence or absence of calorie information can influence consumer behavior in consuming healthy foods, where healthy food consumption has also become one of the trends in food consumption and healthy behavior that has begun to attract public attention (Jeong, Jang, Behnke, Anderson, & Day, 2019; Steingoltz, Picciola, & Wilson, 2018; Yuniarni, 2017). Elbel et al. (2009) found that 27.7% of the samples in their study felt that calorie information influenced their decisions regarding food menu selection at fast food restaurants. Another important finding relates to how food menus with different calorie counts significantly influence feelings of guilt when consuming food, purchase intentions, and selection behavior (Mohr, Lichtenstein, & Janiszewski, 2012). In addition, previous studies have also examined the effect of providing nutritional information and its influence on brand trust and product attitude, where positive or negative relationships have been proposed or found (Burton, Creyer, Kees, & Huggins, 2006; E. Kim & Ham, 2016; Kleef & Dagevos, 2015; G.-E. G. Oh, Huh, & Mukhopadhyay, 2016; Schneider & Ghosh, 2020). Therefore, an investigation into the effect of calorie information on consumer behavior, particularly trust and attitude, is also needed. This is because, in the context of OFDS, such research is still rare (Gunden et al., 2020).

Intention, often referred to as behavioral intention, is an important indicator to see how interested someone is in approaching a behavior and how much effort they put into realizing that behavior (Fishbein & Ajzen, 1977). In other words, intention is an individual's perception of their likelihood of performing a behavior (Guo & Barnes, 2007). Therefore, in this study, purchase intention is further defined as the likelihood of customers purchasing food menus from a restaurant partner on the OFDS platform. In this study, purchase intention is an important output variable and a consequence of the two variables of product and partner evaluation, namely product attitude and brand trust. Attitude is the evaluative dimension of the concept of "good or bad" (Fishbein & Raven, 1962). More simply, attitude can also be defined as positive or negative feelings towards a particular object (Bernstein, 1984). The positive relationship between attitude and purchase intention has been extensively investigated previously (Chu & Chen, 2019; Delafrooz, Paim, & Khatibi, 2011; Hebbar, Kamath, Mathew, & Kamath, 2020; Kim & Chung, 2011; Nguyen et al., 2019; Tandon, Kaur, Bhatt, Mäntymäki, & Dhir, 2021). On the other hand, brand trust can be defined as the extent to which customers trust a company's brand, products, or services in terms of the company's reliability and competence (Herbst, Finkel, Allan, & Fitzsimons, 2012). Low trust in a brand indicates a high risk of transaction failure, low product quality, lack of transaction security, and low service quality (Gefen & Straub, 2004). Several previous studies have also found a relationship between trust and purchase intention (Hong & Cha, 2013; Ling, Chai, & Piew, 2010; Lu et al., 2016). Based on the literature review, this study formulates the following hypotheses (see Figure 1):

H1a: There is a significant difference in product attitude between respondents exposed to different product-background color combinations and those exposed to similar color combinations.

H1b: There is a significant difference in brand trust between respondents exposed to different product-background color combinations and those exposed to similar color combinations.

H2a: There is a significant difference in product attitude between respondents exposed to a high social presence treatment and those exposed to a low social presence treatment.

H2b: There is a significant difference in brand trust between respondents exposed to a high social presence treatment and those exposed to a low social presence treatment.

H3a: There is a significant difference in product attitude between respondents exposed to calorie information and those not exposed to calorie information.

H3b: There is a significant difference in brand trust between respondents exposed to calorie information and those not exposed to calorie information.

H4: Consumer attitudes toward food products on OFDS have a positive effect on purchase intention.

H5: Consumer trust in restaurant partners on OFDS has a positive effect on purchase intention.

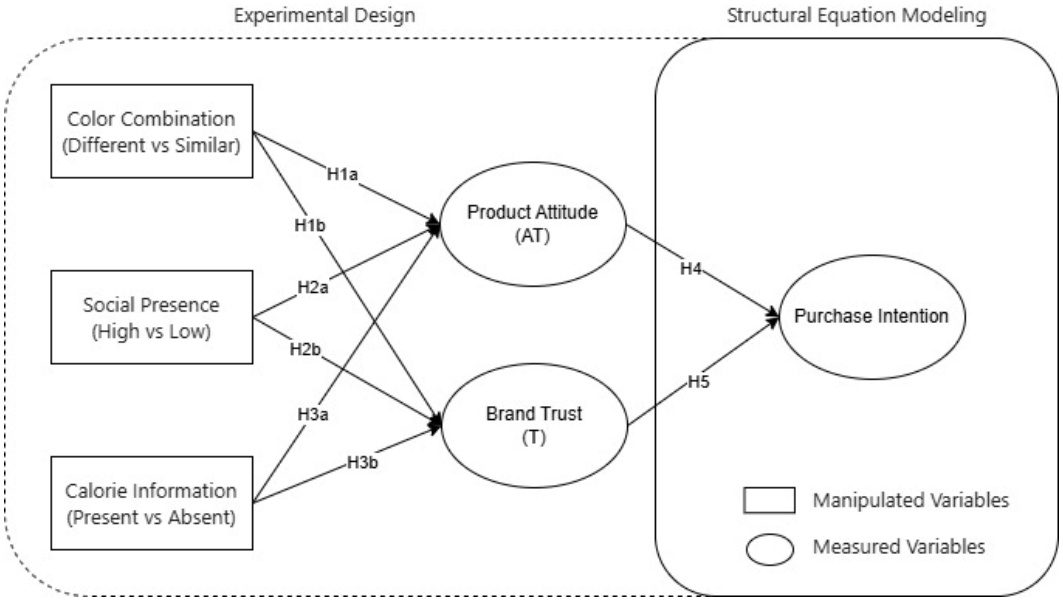

Figure 1. Research Model

Methods

This study employs a quantitative, causal design to test the proposed hypotheses using an experiment and Structural Equation Modeling (SEM). The experimental phase adopts a 2 × 2 × 2 between-subjects factorial design that manipulates (1) product–background color combination (different vs. similar), (2) social presence (high vs. low), and (3) calorie information (present vs. absent), resulting in eight experimental scenarios. Respondents were randomly assigned to one of the eight scenarios via a randomized survey link. After exposure to the assigned stimulus, respondents completed an online questionnaire measuring product attitude, brand trust, and purchase intention. The study was conducted in Indonesia from August to December 2021. Eligible respondents were OFDS users aged 18–64 who had previously ordered food via an OFDS application. A total sample of 240 respondents was targeted (30 per scenario), exceeding the minimum recommendation of 15 respondents per scenario group (Cohen, Manion, & Morrison, 2002). The experimental effects were evaluated using ANOVA to test main effects, with the relevant assumptions (normality, homoscedasticity, and independence of errors) assessed prior to hypothesis testing. Subsequently, SEM was used to examine the relationships among latent variables, and the model estimation was conducted using IBM SPSS AMOS.

Result and Discussions

Demographic analysis was conducted to provide an overview of the demographics of the respondents in this study. The demographic data collected included age, domicile, gender, and type of occupation (Table 1)

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Table 1. Respondent Demographics (N=240).

Respondent Demographics	Frequency	Percentage
Age		30.8
14-20	74	
21-27 years	152	63.3
28-34 years	10	4.2
35-41 years	4	1.7
Total	*240*	*100.0*
Gender	80	
Male		33.3
Female	149	62.1
Others	11	4.6
Total	*240*	*100.0%*
Jakarta	34	14.2
West Java	9	3.8
Central Java	8	3.3
East Java	88	36.7
Banten	4	1.7
Yogyakarta	1	0.4
Aceh	2	0.8
West Sumatra	8	3.3
South Sumatra	3	1.3
Riau	7	2.9
Riau Islands	14	5.8
Bali	3	1.3
West Kalimantan	1	0.4
Central Kalimantan	2	0.8
East Kalimantan	3	1.3
South Kalimantan	1	0.4
NTB	2	0.8
NTT	1	0.4
Others	49	20.4
Total	*240*	*100.0%*
Type of Work		
Not working	33	13.8
Freelancer	18	7.5
Housewives	1	0.4
Student/University Student	123	51.3
Teachers	6	2.5%
Private Sector/State-Owned Enterprises	44	18.3
Civil Servants	5	2.1
Entrepreneurs	6	2.5
Others	4	1.7
Total	240	100.0%

This study will use three-way ANOVA to identify the effect of differences in product color and background combinations, social presence, and calorie information provision in product presentation in the OFDS application on product attitude and brand trust. Analysis of variance (ANOVA) is a statistical analysis technique for two or more groups from a population to determine significant differences between two or more mean measures (J. Hair et al., 2018).

At the beginning of data dissemination, a manipulation check was performed on 30 respondents' data that had been collected. The compatibility between the manipulation and the respondents' understanding was considered a successful manipulation. Table 2 shows that the manipulation check of each variable produced an agreement rate above 80%, which means that the manipulation was successful.

Table 2. Manipulation Check.

Manipulation Variable	Agreement Level
Product Color and Background Combination	86.66
Social Presence	86.66
Calorie Information	90

Next, hypothesis testing was conducted for the variables in the experimental design. Table 3 shows the effect of product evaluation on attitude by displaying the significance value, mean value, and the difference between the two mean values of each variable with different treatment levels.

Table 3. Effect of Product Evaluation on Attitude.

Hypothesis	Manipulated Variable	Mean[a]	Mean[b]	ΔMean	F	Sig.
H1a	Color Combination	3.896	3.955	-0.059	0.403	0.526
H2a*	Social Presence	4.019	3.832	-0.188	4.048	0.045
H3a*	Calorie Information	4.008	3.843	-0.164	3.103	0.079

Dependent Variable: Attitude; a = Similar/Low/Without; b = Contrast/High/With; * = Significant relationship/Hypothesis Accepted

Based on Table 3, the results of the ANOVA test regarding the relationship between the product attitude variable and the experimental variables of product color and product background color combinations with different and similar treatment levels, a mean value of 3.896 was obtained for similar product color and background combinations and 3.955 for contrasting product color and background combinations. The calculated F value was 0.403 and significant at 0.526. This means that the difference in the combination of product color and product background color in product presentation affects users' evaluation of products on OFDS. Thus, it can be concluded that hypothesis 1a (H1a) is rejected.

Based on Table 3, the results of the ANOVA test regarding the relationship between the product attitude variable and the social presence experiment variable with low and high treatment levels, a mean value of 4.019 was obtained for the low social presence treatment level and 3.832 for the high social presence treatment level. The calculated F value is 4.048 and significant at 0.045. This means that differences in the level of social presence in product

presentation affect users' evaluation of products on OFDS. Thus, it can be concluded that hypothesis 2a (H2a) is accepted.

Based on Table 3, the results of the ANOVA test regarding the relationship between the product attitude variable and the calorie information experiment variable with the treatment level with and without calorie information, a mean value of 4.008 was obtained for the treatment level with calorie information and 3.843 for the treatment level without calorie information. The calculated F value is 3.103 and significant at 0.079. This means that the presence or absence of calorie information in product presentation affects users' evaluation of products on OFDS. Thus, it can be concluded that hypothesis 3a (H3a) is accepted.

Table 4 shows the effect of product evaluation on trust by displaying the significance value, mean value, and the difference between the two mean values of each variable with different treatment levels.

Table 4. Effect of Product Evaluation on Trust.

Hypothesis	Manipulated Variable	Mean[a]	Mean[b]	ΔMean	F	Sig.
H1b	Color Combination	3.823	3.893	0.065	0.448	0.504
H2b	Social Presence	3.911	3.810	-0.101	1.081	0.299
H3b	Calorie Information	3.911	3.810	-0.101	1.081	0.299

Dependent Variable: Attitude; a = Similar/Low/Without; b = Contrast/High/With; * = Significant relationship/Hypothesis Accepted

Based on Table 4, the results of the ANOVA test regarding the relationship between the brand trust variable and the experimental variables of product color and product background color combinations with different and similar treatment levels, a mean value of 3.823 was obtained for similar product color and background combinations and 3.893 for contrasting product color and background combinations. The calculated F value was 0.448 and significant at 0.504. This means that the difference in product color and background color combinations in product presentation did not affect users' evaluation of restaurant partners on OFDS. Thus, it can be concluded that hypothesis 1b (H1b) is rejected.

Based on Table 4, the results of the ANOVA test regarding the relationship between the brand trust variable and the social presence experiment variable with low and high treatment levels, a mean value of 4.911 was obtained for the low social presence treatment level and 3.810 for the high social presence treatment level. The calculated F value is 1.081 and significant at 0.299. This means that the difference in the level of social presence in product presentation does not affect users' evaluation of restaurant partners on OFDS. Thus, it can be concluded that hypothesis 2b (H2b) is rejected.

Based on Table 4, the results of the ANOVA test regarding the relationship between the brand trust variable and the calorie information experiment variable with treatment levels with and without calorie information, the mean value was 4.911 for the treatment level with calorie information and 3.810 for the treatment level without calorie information. The calculated F value is 1.081 and significant at 0.299. This means that the presence or absence of calorie information in product presentation does not affect user evaluation of restaurant partners on OFDS. Thus, it can be concluded that hypothesis 3b (H3b) is rejected.

The construct variables adopted from previous studies were tested using Confirmatory Factor Analysis (CFA), which is an analysis used to determine whether the indicator variables in previous studies are representative of a latent variable (Malhotra, 2010). Latent variables whose indicator variables have factor loadings are then tested for validity and reliability to ensure that the measurement model is accurate and reliable.

Table 5. Validity and Reliability Test Results.

Indicator	Factor loading (≥ 0.7)	AVE (≥ 0.5)	Cronbach's Alpha (≥ 0.6)	CR (≥ 0.6)
Product Attitude				
AT1	0.74	0.630	0.943	0.944
AT2	0.76			
AT3	0.84			
AT4	0.78			
AT5	0.76			
AT6	0.76			
AT7	0.84			
AT8	0.84			
AT9	0.79			
AT10	0.82			
Brand Trust				
T1	0.82	0.738	0.944	0.944
T2	0.81			
T3	0.89			
T4	0.89			
T5	0.85			
T6	0.89			
Purchase Intention				
P1	0.75	0.661	0.915	0.886
P2*	0.55			
P3	0.73			
P4*	0.64			
P5	0.7			
P6	0.73			

Table 5 shows that the factor loadings of all indicators have values above 0.7, which means that the values of AVE, Cronbach's Alpha, and Composite Reliability also meet the cut-off values, so that no indicator variables need to be removed except for indicators P2 and P4. Therefore, the measurement model can be declared accurate and reliable and can be used in the structural model.

Next, a goodness-of-fit test needs to be conducted to test validity by examining the suitability of the data obtained. According to Malhotra (2010), a model can be said to be fit if it meets at least 1 absolute goodness-of-fit, 1 absolute badness-of-fit, 1 incremental fit index, and 1 parsimony fit index. Table 6 shows that the structural model in this study can be considered fit because there are suitability indices that exceed the cut-off value in each index group.

Table 6. Model Fit Test Results.

No	Goodness of Fit Measurement	Cut-off Value	Value	Desc.	Reference
Absolute Fit Indices					(Abedi et al., 2015; Bahadori et al., 2014; J. Hair et al., 2018; Nekouei et al., 2014; Y.-S. Oh, 2013; Yao et al., 2007; Yik & Russell, 2003)
1	CMIN/df	≤ 5	4.050	Accepted	
2	Goodness of Fit Index (GFI)	≥ 0,80	0.808	Accepted	
3	Adjusted Goodness of Fit (AGFI)	≥ 0,90	0.760	Rejected	
4	Root Mean Square Residually (RMR)	≤ 0,08	0.275	Rejected	
5	Root Mean Square Error of Approximation (RMSEA)	≤ 0,12	0.113	Accepted	
Incremental Fit Indices					
6	Normed Fit Index (NFI)	≥ 0,80	0.851	Accepted	
7	Compared Fit Index (CFI)	≥ 0,80	0.883	Accepted	
8	The Tucker Lewis Index (TLI)	≥ 0,80	0.867	Accepted	
Parsimonious Normal Fit Index (PNFI)					
9	Parsimonious Normal Fit Index (PNFI)	≥ 0.60	0.752	Accepted	
10	Parsimonious Goodness of Fit Index (PGFI)	≥ 0.60	0.781	Accepted	

The next step is to test the hypotheses. The results of the hypothesis testing are shown in Table 7. Table 7 shows that a positive correlation between the two relationships can be seen. Product attitude has a positive correlation with purchase intention with an estimate value of 0.733, and brand trust has a positive correlation with purchase intention with an estimate value of 0.338. Therefore, both hypotheses are accepted. The Squared Multiple Correlation value for purchase intention in this study is 67.5%, which means that the model is able to describe 67.5% of the total customer intention to order food through OFDS.

Table 7. Hypothesis Test Results.

Hypothesis Effect	Standardized Coefficient	P-Value	Hypothesis Description
H4: Product Attitude → Purchase Intention	0.73	***	Accepted
H5: Brand Trust → Purchase Intention	0.338	***	Accepted

*** = < 0.001

Based on the results of the study, it can be seen that differences in the treatment levels of product presentation factors do not entirely influence product attitude in OFDS. This conclusion is based on the results of testing using ANOVA, which shows a significant difference in product attitude for different treatment levels of the variables of social presence and calorie information. Contrary to the proposed hypothesis, the combination of color and background did not show a significant effect even though there was a higher mean of product attitude when the combination of product color and background was contrasting. Thus, hypotheses 2a and 3a were accepted, while hypothesis 1a was rejected. The rejection of hypothesis 1a indicates that the findings of previous studies supporting similar hypotheses in different cases do not apply in the case of this study. One of the main reasons why the combination of color and background did not have a significant effect on product attitude is how humans perceive color contextually. This contextual nature of color

perception can change how the concept of emphasis, which is the basis for why contrasting color combinations can increase consumer attention, becomes irrelevant. This happens because, in addition to food product photos, OFDS users also obtain other information related to color, namely the theme color of the OFDS application, or even the light settings of the cell phone used by the user. These factors may explain why hypothesis 1a was rejected.

Hypotheses 2a and 3a, which are supported, can be interpreted to mean that, in line with previous studies, product presentation factors such as social presence and calorie information have an influence on product evaluation or product attitude. However, unlike some previous studies, the relationship between social presence and calorie information and product attitude is negative. This means that product photos containing humans will result in a lower product attitude. This can be explained by referring to the study Gao et al. (2021), which explains that human interaction with technology has a very important attribute, namely the perception of privacy. A person may feel embarrassed when they feel that others are watching them while conducting a transaction. This embarrassment usually disappears when interacting with technology that does not require interaction with other people. The need for privacy in product choices can also be strongly influenced by the perception of social presence. The findings in this study confirm the importance of social presence and the level of treatment that can improve product evaluation on OFDS (low social presence).

In addition, the significant negative relationship between the level of calorie information treatment and product attitude is also an interesting finding that may have real implications for OFDS platforms and restaurant partners. Previous studies that found a positive relationship between calorie information provision and product attitude generally used healthy food items as objects. In this study, because the research objective was to examine general product presentation factors, food items that did not fall into the 'healthy food' category were used. These results are consistent with previous studies where calorie information provision is indeed a significant factor influencing product attitude, but with a negative effect (Burton et al., 2006; Jeong et al., 2019). This negative relationship may occur because when someone is in the process of ordering food, calorie information may cause them to consider other factors, namely health and nutritional needs. The more factors that are considered, the higher the assessment standards for something become. In this research scenario, without calorie information, a person may evaluate fried rice products based only on experience, taste, and product photos. In contrast, when given calorie information, a person may then consider the health, diet, and nutritional aspects of the product. This can then influence the number of considerations made by customers and subsequently cause product attitude to decline. In addition, consumers who are not concerned with healthy eating patterns may feel that nutritional information such as calorie information is an unpleasant form of control by the government or public health agencies (Malam et al., 2009). This makes them more likely to avoid foods that contain nutritional information.

This differs from the ANOVA test results for the first hypothesis (H1a, H2a, and H3a), where two of the three hypotheses were accepted. In the second hypothesis (H1b, H2b, and H3b), all hypotheses were rejected. Neither the combination of product color and background, social presence, nor calorie information had a significant effect on partner evaluation or brand trust. These results differ from most previous studies. This difference

in results may be due to various specific aspects that differ depending on the presentation factors. The rejection of H1b, for example, related to the relationship between product color and background color combinations, may be influenced by the same factors that led to the rejection of H1a, whereby the colors evaluated by users are not only those in the product photos, but also the colors of the application, the theme on the smartphone, or the color of the smartphone that customers use themselves. In addition, color contrast may not be related to trust in the context of OFDS, because food has certain characteristics. This differs from the main reference of the study, which used gift boxes and other non-food products (Huang et al., 2020). Color itself may have a more significant effect on trust than the level of color contrast; in one previous study, an increase in trust was caused by the use of blue (Sasidharan, 2010).

For color combinations, social presence, and calorie information, the rejection of these relationships may be due to the fact that customer evaluations of restaurant partners may be based more on factors that are not related to product presentation, but rather on factors related to the restaurant partners themselves. For example, customer trust may be more influenced by restaurant ratings, the number of reviewers, product prices, and so on.

The acceptance of both hypotheses (H4 and H5) in the SEM model plays an important role in this study. First, the relationship between product attitude and brand trust on purchase intention is the main foundation of the relationship between product evaluation factors (color, social presence, and calorie information). If there is no significant relationship between product evaluation factors and purchase intention, the product presentation factors studied in this study will become irrelevant. In addition to finding a significant and positive relationship, the squared multiple correlation value of purchase intention also shows a high value of 67.5%. This means that the SEM model in this study can describe 67.5% of the variance in purchase intention, indicating that attitude and trust are two very important variables when seeking to increase the purchase intention of OFDS users.

However, based on the results of the ANOVA analysis for the first and second hypotheses, brand trust is not influenced by presentation factors. Therefore, in this study, only product attitude mediates the relationship between product presentation and purchase. The acceptance of these two relationships (H4 and H5) means that the intentions of OFDS customers are strongly influenced by product attitude and brand trust. Furthermore, the effect on purchase intention exerted by product attitude ($\beta = 0.733$) can be considered much greater than that of brand trust ($\beta = 0.338$).

Conclusion

This study examines the influence of three product presentation factors (color combination, social presence, and calorie information) on consumer evaluation (product attitude and brand trust) and purchase intention in the context of Online Food Delivery Services (OFDS). The experimental results show that only social presence and calorie information have a significant effect on product attitude, but the direction of the effect is negative. This means that to increase positive customer responses to OFDS product evaluations, restaurant partners should consider choosing low social presence in product photos and not including calorie information. Meanwhile, color combination, social presence, and calorie information do not significantly affect brand trust, suggesting that

trust is more influenced by restaurant ratings, the number of reviewers, product prices, and so on. On the other hand, SEM confirms that both product attitude and brand trust have a positive effect on purchase intention, with attitude having a more dominant influence. These findings contribute theoretically to understanding the limitations of visual design effectiveness on OFDS platforms, as well as practical implications: partners and platforms should avoid human elements in product photos and the inclusion of calorie information in order to maintain positive consumer responses. The limitations of this study include the use of red as the base color in color manipulation and the context of ridesharing-based platforms (Gofood & Grabfood); further research is recommended to explore color variations and platform types (e.g., marketplace-based platforms such as Shopeefood and Tokopedianyam!). Finally, this study only involved attitude and trust; other variables may be important and should be investigated further by future researchers.

The findings of this study provide managerial implications for restaurant partners and OFDS platform managers. Partners can use the demographic profiles of respondents as a reference for understanding the market, while also improving product attitude and brand trust through realistic product presentation—including photos, names, and descriptions that are not exaggerated—as well as maintaining consistency in quality, cleanliness, and transparency of information (such as halal certification). To support this, platform managers are advised to standardize product photo displays, strengthen social signals (ratings, reviews, number of orders), and provide trust labels (e.g., "Accurate Restaurant") for consistent partners. However, given the potential negative impact of social presence and calorie information, both partners and platforms are advised to avoid using human elements in product photos and not to include calorie information or health claims in product names or descriptions until there is evidence to support their benefits.

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