RESEARCH ARTICLE

Facebook Marketplace: The Mediating Effect of Perceived Quality to Image Quality and Purchase Intention

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With the limitations posed by the COVID-19 pandemic, marketers and sellers have shifted to using online platforms to market and sell their products. Thus, the objective of this study is to test the influence of the quality of food images used online on the perceived quality of the food product and on customers' intent to purchase. Partial least square structural equation modeling (PLS-SEM) was used to test four hypotheses. Results suggest that food image quality significantly influences perceived value, perceived value significantly influences purchase intention, and food image quality significantly influences purchase intention. Further, it was revealed that perceived quality mediates the relationship between food image quality and purchase intention. The results of the study have implications for marketers and online food sellers, which may serve as their basis in assuring that food photos they use in selling food on online platforms will translate into purchase intention. The study also contributes to the available literature because limited studies tested image quality as an extrinsic cue and investigated the mediating role of perceived quality.

Keywords: Food image quality, perceived quality, purchase intention

JEL Classification: *M31*

The COVID-19 pandemic has greatly affected the global economy and continues to impact our overall well-being. The income of families is greatly affected due to unemployment and economic slowdown, making it important for people to look for alternative ways to earn to at least get by. Knowing that food is a basic necessity, a number of people have ventured into the food business, considering the minimal resource requirements and its potential returns. Additionally, the food business has consistently maintained its reputation as one of the main expenses of every household. It was reported that the purchase of food and non-alcoholic beverages constituted nearly 40% of total household expenditures in the year 2018 (Simeon, 2019), making

the Philippines' food and beverage (F&B) sector one of the largest contributors to the country's economy, comprising about 50% of its manufacturing industry and about 24% of the nation's gross domestic product (South-East Asia IPR SME Helpdesk, 2018). Pre-pandemic, it was projected to grow to PhP637.3 billion and PhP656.5 billion in 2020 and 2021, respectively (Masigan, 2019). With the outbreak of COVID-19 in 2020, the F&B industry was hardly hit, causing massive losses in the global economy (Chowdhury et al., 2022), making it imperative for businesses to adapt to the demands of the volatile business landscape. According to Wu (2020), F&B businesses are forced to operate with restricted sanitation guidelines and protocols prescribed by the government and expected by customers, considering their heightened attention to sanitation efforts and safety measures more than ever before. This is evidenced by an online survey of roughly 2,500 respondents that revealed that if social distancing is reduced to one meter, only 40% of the respondents will be comfortable dining in restaurants, and only 21% will be comfortable going to beverage facilities such as bars and pubs (Association for Canadian Studies, 2020). Considering that seating capacity is a vital consideration to revenue management (Heo et al., 2013), the implementation of social distancing limits the seating capacity and takes a toll on the profitability of the business.

Although sanitation and safety procedures have always been part of a food business's makeup, the Inter-Agency Task Force (IATF), in collaboration with the different arms of the government, mandates dining facilities to implement stringent health protocols. To operate, dine-in facilities must at least (a) have provision for proper ventilation; (b) installation of appropriate dividers for face-to-face seating; (c) installation of preferably color-coded floor markings for queueing; (d) assure sanitization of tables and chairs every after use; (e) provision for sanitizing tools and equipment; (f) provide individual menus per table; (g) at least one-meter distancing of chairs and tables on all sides; (h) regular disinfection of high-risk places; (i) covering of porous materials with plastic; and (j) contactless order-taking (Department of Trade and Industry, 2020).

With all the limitations posed by health protocols and the anxiety of customers in dining-in restaurants, among other factors, four in every 10 restaurants closed due to the pandemic (Wu, 2020), making it vital for restaurant owners to be creative in the way they do things to assure the sustenance of their businesses. According to Marasigan (2019), having online and delivery service is vital to reach the younger generations and to address the logistical limitations of traffic and parking. E-commerce and digital trends in food businesses are evolving, with the emanation of online ordering with delivery options and the emergence of ghost kitchens, which are all growing (Nunez, 2020). Ghost kitchens or virtual kitchens are restaurants without physical footprints or storefronts, maximizing the kitchen space to prepare food to deliver to customers (Morgan, 2020) and utilizing online platforms to market and generate sales. It was further proposed by Pham et al. (2020) that the COVID-19 pandemic has a relationship with consumers' awareness of utilities, encouraging them to shop online. These opened doors for home-based food businesses and became a lifeline for many, especially for those suddenly without a regular source of income due to the pandemic (Arnaldo, 2020). Mostly, having limited background and training in the food business, it is important to know how food images posted online affect the perception of customers on the quality of the product, as well as how it influences their intention to purchase, considering that social media advertising makes way for home-based food businesses in expanding their market share as well as to generate sales (Harshini, 2015). Thus, this study aims to test the influence of the quality of food images used online on the perceived quality of the food product and customers' intent to purchase.

Food Image Quality

With the present COVID-19 pandemic, social media is one of the primary means to market and advertise products. It is projected that social network marketing will be the future marketing tool that will have more influence on customers versus traditional approaches (Phillips & Noble, 2007). According to Teo et al. (2018), more recent studies show that social networking sites have developed and become more visual-centered, emphasizing the use of photos and videos, which allow the sharing of information to be faster and more entertaining (Gvili & Levy, 2016). Accordingly, the use of photos to market and sell food products may be more effective, considering that social influence through social media affects customer

behavior, particularly on the perception of quality and purchase intention (Djafarova & Rushworth, 2017; Phua & Ahn, 2016).

One of the limitations of selling food products online is that customers cannot examine food products physically, so they need to rely on other informational cues for their decision-making, such as online product presentation or food images (Teo et al., 2018). The properties of images used in marketing, particularly their quality, influence the affective experience for customers (Colliander & Marder, 2018), making it an essential consideration in posting images on digital platforms. Photo image quality assessments have been studied to identify the criteria that people use to judge a photo. A general criterion identified is simplicity, which means that a photo must be simple enough that the viewer easily knows where to look and separates the subject from its background (Ke et al., 2006).

Image quality may also be evaluated based on aesthetic features, as Yeh and Cheng (2012) noted the rule of thirds, clarity, intensity balance, saturation, and hue. The rule of thirds states that one should imagine breaking down an image into thirds, both horizontally and vertically, creating nine parts. With the grids in mind, the points of interest must be placed in the intersections or along the lines, making the image more balanced and enabling the viewer to interact naturally with the photo (Rowse, n.d.). In spatial distribution, it is expected that the subject is clustered near the center of the image, which contributes to its simplicity (Ke et al., 2006). Clarity is the increase in the middle tones of the image to bring out the textures of the photo (Hamel, n.d.) and to ensure that the camera is not out of focus to avoid blurred photos (Yeh & Cheng, 2012), which is often caused by poor technique (Ke et al., 2006). Intensity balance is a compositional method in photography that interweaves images within a frame to ensure that the subjects are of equal visual weight (Lin, 2022. Saturation is the vibrance and intensity of images with depth (Manickam, 2019). According to Yeh and Cheng (2012), hue is the purity of colors and the use of true tones of red, blue, yellow, orange, green, and violet. It is also a common metric used in analyzing the quality of the photo and is a measure of its simplicity (Ke et al., 2006). Using these features is a more accurate way to measure personally perceived image quality than other methods (Korhonen, 2019) that make up the quality of the image, which may affect the perceived quality of the food product.

Perceived Quality

Perceived quality refers to the customers' judgment of the overall excellence or superiority of a product (Zeithaml, 1988). The appreciation of customers' mindset of food quality is highly significant because their buying decisions rely on these frames (van Rijswijk & Frewer, 2008). Quality evaluation of food usually involves two steps that involve the evaluation that happens preceding the purchase and the evaluation after the purchase (Petrescu et al., 2019); the former involves the use of cues such as the visual appearance of the product (Ooijen et al., 2017).

Grounded on the premise that the quality of food is formed based on the perception of customers (Baiardi et al., 2016), understanding the variety of signals or cues that influence perceived food quality is important. Quality signals or cues contribute to the process of inferring quality based on the characteristics of the product and from other available information, which may either be intrinsic [physical properties] or extrinsic [everything else](Grunert, 2005). Intrinsic cues are those associated with the product itself and cannot be replaced without changing the attributes of the product. On the other hand, extrinsic cues are associated with the product without being one of its physical components (Miyazaki et al., 2005; Richardson et al., 1994). The three extrinsic cues that are mostly related to perceived quality are brand name, country of origin, and price (Quasem et al., 2016). Considering that customers depend on extrinsic product cues as compared to intrinsic product cues when one has limited information about the product (Zeithaml, 1988), and with changes in the business landscape brought about by the COVID-19 pandemic, it is pivotal to explore other extrinsic cues associated to digitalization, such as the quality of the images used in online marketing that may affect one's purchase intention.

Purchase Intention

Studying purchase intention is one of the typical approaches used by marketers in comprehending customers' actual behavioral intentions (Blackwell et al., 2006; Ghalandari & Norouzi, 2012). The two constructs have been proven to have a strong correlation (Kim & Pysarchik, 2000). According to Ghosh (1990), the measurement of purchase intention is an alternative for predicting the buying process and testing customers' purchase behavior. During the COVID-19 pandemic, a shift to the use of digital

technology in buying food products online, including information gathering and actual purchases, was observed (Batu et al., 2020). Purchase intention has often been associated with other constructs, such as extrinsic cues (Pezoldt et al., 2014; Quasem et al., 2016; Teo et al., 2018; Yan et al., 2019) and perceived quality (Quasem et al., 2016; Setiawan et al., 2017; Teo et al., 2018; Yan et al., 2019), which have been studied in the different types of industries.

Food Image Quality

The relationship of extrinsic cues or the components that are not one of the physical components of the product (Miyazaki et al., 2005; Richardson et al., 1994), including image quality and perceived quality, have been explored in other studies in different settings. Oftentimes, it was found that extrinsic cues have a significant effect on perceived quality (Javeed et al., 2017; Quasem et al., 2016). Specifically, it was found that higher-quality images resulted in higher levels of perceived quality (Teo et al., 2018).

H1. Image quality has a significant influence on perceived quality.

Perceived Quality and Purchase Intention

The relationship between perceived quality and purchase intention has been vastly tested in different industries. The various studies revealed that perceived food quality encapsulates a number of factors that fundamentally influence visit frequency (Ponnam & Balaji, 2014; Qin et al., 2010). In general, it was also found that there is a significant relationship between perceived quality and purchase intention (Asshidin et al., 2016) and that purchase intentions are built at the final point when the customer gets a good perceived quality (Shakeel, 2014). Specifically, it was also found that online perceived quality is positively and significantly related to purchase intention (Setiawan et al., 2017).

H2. Perceived quality has a significant influence on purchase intention.

Food Image Quality and Purchase Intention

Considering the number of studies conducted on extrinsic cues and their influence on purchase intention, literature often covers these determinants: brand name, country of origin, and price (Quasem et al., 2016). Very limited studies have been conducted

to test image quality as an antecedent of purchase intention. Past studies have shown that extrinsic cues, in general, influence purchase intentions (Pezoldt et al., 2014; Quasem et al., 2016; Teo et al., 2018; Yan et al., 2019;), and high-quality image, as an extrinsic cue, was found to result to higher levels of purchase intention (Teo et al., 2018). In social media platforms, it was found that photo image quality impacts the users' behavior, such that the higher the quality of the photo, the more engaged the users are in terms of the posts they assign to the image (Bounab et al., 2020). This engagement provides opportunities for social trade that allows customers to create substance, impact others (Dissanayake et al., 2019), and ultimately impact the purchase behavior of customers (Farook & Abeysekara, 2016). A direct link was also found between attractive social media advertisements and the purchase intention of customers (Suprapto et al., 2020).

H3. Image quality has a significant influence on purchase intention.

Food Image Quality, Perceived Quality, and Purchase Intention

One of the objectives of the study is to test the mediating role of perceived quality between the relationship of image quality and purchase intention. Literature shows that limited studies have tested this model in the food business setting. However, other extrinsic cues such as category complexity, risk importance, category quality variation, product signatureness, and purchase intention (Yan et al., 2019) were used to test the mediating role of perceived value, which are significant. In Teo et al. (2018), the three constructs are related, but the mediating effect was also not tested. On social media platforms, the intervening role of customer perception between social media advertising and purchase intention was also found to be significant (Suprapto et al., 2020). With the related literature cited, the relationship of extrinsic cues and perceived quality, perceived quality and purchase intention, and extrinsic cues and purchase intention have all been tested and were found to be significant. Settings were, however, in other industries and non-digital platforms. Although the relationship between the three constructs has been tested, the mediating role of perceived quality has yet to be explored. Additionally, all prior studies have been conducted prior to the COVID-19 pandemic.

Figure 1.

Image Quality, Perceived Quality, Purchase Intention, and the Mediating Role of Perceived Quality Framework

H4. Perceived quality has a significant mediating effect on the relationship between image quality and purchase intention.

This study intends to test the relationship between image quality, perceived value, and purchase intention, as well as the mediating role of perceived value, specifically in food products sold on digital platforms, particularly in the Facebook Marketplace. The results of the study will have implications for online food business owners as their guide in creating and posting food images on social media because the study will identify specific image quality attributes that translate to perceived quality and purchase intention. The study will also contribute to the literature, in general, because it will ascertain the role of perceived quality in digital platforms where observance of quality cues is limited.

Total Food Quality Model

A theory that supports the framework of this study is the total food quality model of Grunert et al. (1996), which proposes that food quality perception and its influence on customer food choices may be analyzed using two major dimensions—horizontal and vertical dimensions. The horizontal dimension refers to the timelines of perceived quality before and after the purchase, whereas the vertical dimension deals with inference-making, using signals or quality cues, which are basic motivators of human behavior (Grunert et al., 1996). The vertical dimension is further supported by the cue utilization theory, which states that product quality is signaled by customers using multiple cues (Olson, 1972), and they make use of these cues to evaluate product quality (Rao & Monroe, 1988). The three cues identified by the model are cost cues,

extrinsic cues, and intrinsic cues. Cost cues are those that may lead to perceived cost and intention to buy, whereas extrinsic and intrinsic cues are the attributes of the food product that may contribute to expected quality, which may translate to purchase intention (Grunert, 2005). This study will focus on the timeline before the purchase (horizontal dimension), using image quality as an external quality cue (vertical dimension), which may influence perceived quality (expected quality) and may lead to purchase intention (intention to buy).

Methods

This research is quantitative and will employ a causal research design because it intends to test the change in the exogenous variable as a result of the changes in the endogenous variables through quantitative techniques. In this research paper, perceived quality and purchase intention are the exogenous variables, whereas image quality is the endogenous variable. The study investigated the relationship between image quality, perceived quality, and purchase intention, as well as the mediating effect of perceived quality between the two constructs.

Participants

A purposive sampling technique was utilized wherein participants of the study were those who belonged to the age group 18 and above and had experienced purchasing food items using the Facebook Marketplace in the past year (April 2020 to June 2022. Using inverse square root and gamma exponential method, with 0.22 minimum absolute significant path coefficient (based on the structural model), 0.05 significance level, and 0.90 power level, the minimum

Table 1. *Demographic Characteristics of the Respondents*

	Frequency	Percentage
Age		
19 to 25	95	46.12%
26 to 32	40	19.42%
33 to 39	35	16.99%
40 to 46	25	12.14%
47 to 53	8	3.88%
54 to 60	2	0.97%
61 to 67	1	0.49%
Sex		
Male	78	37.68%
Female	129	62.32%
Place of Residence		
Angeles City	56	27.18%
City of San Fernando	36	17.48%
Bacolor	17	8.25%
Magalang	13	6.31%
Mabalacat City	11	5.34%
Porac	10	4.85%
Guagua	8	3.88%
Lubao	8	3.88%
Floridablanca	7	3.40%
Santo Tomas	5	2.43%
Minalin	5	2.43%
Masantol	3	1.46%
Others	27	13.11%

sample size is 177 for the inverse square root method and 162 for gamma exponential method (Kock, 2017a). Thus, the 209 sample size is more than sufficient. Table 1 shows that the majority of the respondents are in the age group 19 to 25 years old (46.12%), are female (62.32%), and are residing in Angeles City (27.18%).

Instrument

A survey questionnaire was the primary tool in collecting the data. It has four parts: demographics, image quality, perceived quality, and purchase intention. Adapted scales developed and tested by other researchers will be used. Particularly, all items in the section on image quality were adapted from Yeh and Cheng (2012), covering the five essential components of image quality: rule of thirds, clarity, intensity balance, saturation, and hue. All items in the section on perceived quality were adapted from Hanaysha (2016), and all questions in the section on purchase intention were adapted from the instrument by Saxena (2011). Section one presents questions

on demographics to identify the age, sex, area of residence, and a timeline question—whether they have accessed the Marketplace of Facebook.

Data Collection

Data collection was facilitated online by creating a questionnaire using Google Forms, which was sent directly to the respondents through the researcher's own Facebook network. The researcher also used intermediaries, including his friends, relatives, and colleagues, for maximum reach. Out of the 270 floated, 209 usable survey questionnaires were collected, equivalent to a response rate of 77.41%.

Data Analysis

Partial least square structural equation modeling (PLS-SEM) was employed in testing the four hypotheses of the study. Particularly, the statistical software Warp-PLS version 6.0 was used to test the relationships among observed and latent variables (Khine, 2013). This also permitted the researcher to

identify the model fit, test the causal models with a linear equation system, perform confirmatory factor analysis, and determine the regression model, including the mediating effect of perceived quality.

Ethical Considerations Approval from the Institutional Review Board was sought prior to the implementation of the research protocol. The participants were informed using a cover letter to present the purpose of the study, the nature of their commitment, the confidentiality of the collected data, and their right

to withdraw or withhold information. An informed consent follows the cover letter, which states that their submission of the completed questionnaire will signify as their consent to participate in the study.

Results

Model Fit and Quality of Indices
The model-wide fit indices of the structural equation model were calculated. Particularly, the average path coefficient (APC)[0.540, p=<0.001], the

Table 2. *Model Fit and Quality of Indices*

Index	Coefficient
Average Path Coefficient (APC)	0.540, p <0.001
Average R-squared (ARS)	0.629, p <0.001
Average Adjusted R-squared AARS	0.626, p <0.001
Average Block VIF (AVIF)	2.691, acceptable if <=5, ideally <=3.3
Average Full Collinearity VIF (AFVIF)	3.041, accepatble if <=5, ideally <=3.3
Tenenhaus GoF (GoF)	0.743, small >=0.1, medium >=0.25, large >=0.36
Sympson's Paradox Ratio (SPR)	1.000, acceptable if >=0.7, ideally = 1.0
R-squared Contribution Ratio (RSCR)	1.000, acceptable if >=0.9, ideally =1.0
Statistical Suppresion Ratio (SSR)	1.000, acceptable if =0.7
Nonlinear Bivariate Causality Direction Ratio (NLBCDR)	1.000, acceptable if >=0.7

Table 3. *Reliability and Validity Statistics*

Item	Item Loading	AVE	CR	CA
Image Quality				
IQ1	0.865			
IQ2	0.867			
IQ3	0.939	0.842	0.970	0.962
IQ4	0.944			
IQ5	0.897			
IQ6	0.989			
Perceived Quality				
PQ1	0.922			
PQ2	0.937			
PQ3	0.913	0.871	0.971	0.963
PQ4	0.952			
PQ5	0.943			
Purchase Intention				
PI1	0.957			
PI2	0.979			
PI3	0.960	0.920	0.979	0.971
PI4	0.941			

AVE - average variance extracted; CR - composite reliability; CA - Chronbach's alpha
* All items are signicant (p = ,0.001)

Table 4. *Discriminant Validity Statistics*

	Image Quality	Perceived Value	Purchase Intention
Image quality	0.918		
Perceived Value	0.773	0.934	
Purchase intention	0.714	0.795	0.959

average r-squared (ARS)[0.629, p=<0.001], and the average adjusted r-squared (AARS)[0.626, p=<0.001) were found to have p-values below the acceptable 0.05 (Kock, 2017a). The average full collinearity VIF (AFCVIF) of the model is 3.041, which is below the ideal <=3.3 and the acceptable <=5. This means that the model has no common method bias and pathological collinearity (Kock, 2015). The test also resulted in a Tenehouse GoF (GoF)[0.703], implying a large effect size because it exceeds 0.36 (Kock, 2017a). As seen in Table 2, the model also yielded ideal coefficients on Simpson's paradox ratio (SPR)[1.00], r-squared contribution ratio (RSCR)[1.00], statistical suppression ratio (SSR)[1.00], and nonlinear bivariate causality direction ratio (NLBCDR)[1.00] (Kock, 2017a).

Scrutiny of the Measurement Model

The measurement model of the study was analyzed by testing the reliability and validity of the latent variables. As presented in Table 3, image quality (CR=0.970, CA=0.962), perceived quality (CR=0.971, CA=0.963), and purchase intention (CR=0.979, CA=0.971) all exceeded the minimum acceptable value of 0.70 (Kock, 2014).

The item loading and average variance extracted (AVE) were also computed to measure the validity of each item. All items yielded item loadings of >0.50 and p-value of <0.001, suggesting a correlation between the items and the construct (Kock, 2017b). In terms of AVE, the constructs image quality (AVE=0.842), perceived quality (AVE=0.871), and purchase intention (AVE=0.920) have an ideal AVE because all exceed the minimum threshold of 0.50 (Fornell & Larcker, 1981).

According to Fornell and Larcker (1981), discriminant validity requires that the square roots of AVEs, found diagonally in Table 4, must be higher than the off-diagonal coefficients. Table 3 shows that the square root of AVEs of all constructs in this study's model are greater than any of the correlations in each construct, signifying that the questions intended for a particular construct are not confused and are not connected to another construct (Kock, 2017b).

Linear Model Hypotheses Explanations

Results revealed that image quality significantly affects perceived quality ($\beta = 0.77$, p=<0.001) with a large effect size (Cohen's f^2=0.598), implying that for every unit of increase in image quality is 0.77 unit of increase in perceived quality. Thus, *H1* is supported. Perceived quality was also found to have a significant influence on purchase intention ($\beta = 0.63$, p=<0.001) with a large effect size (Cohen's f^2=0.500), suggesting

Table 5. *Results of the Hypotheses Testing*

Hypotheses	β	p	SE	f^2	Decision
Direct effects					
H1. Image Quality → Perceived Quality	0.773	<0.001	0.060	0.598	supported
H2. Perceived Quality → Purchase Intention	0.625	<0.001	0.061	0.500	supported
H3. Image Quality → Purhase Intention	0.222	<0.001	0.066	0.159	supported
Indirect effect					
H4. Image Quality → Perceived Quality → Purchase Intention	0.484	<0.001	0.045	0.345	supported

β – path coefficient; p – p-value; SE – standard error; f2 – effect size; The effect sizes follow Cohen's (1988) criterion: 0.02=small, 0.15=medium, 0.35=large.
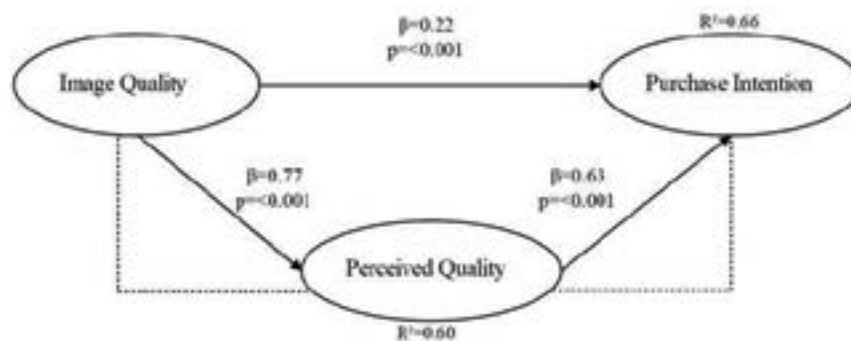
Figure 2.

Structural Model with Beta Eoefficients

that for every unit of increase in perceived value is 0.63 unit of increase in purchase intention, supporting *H2*. Additionally, results support *H3* because image quality was also found to have a significant influence on purchase intention (β = 0.22, p=<0.001) with a medium effect size (Cohen's f^2=0.159), implying that for every unit of increase in image quality is 0.22 unit of increase in purchase intention.

In terms of mediating effects, results revealed that perceived value has a significant mediating effect on the relationship between image quality and purchase intention (β = 0.484, p=<0.001) and large effect size (Cohen's f^2=0.345). Thus, *H4* is supported.

Discussion

Results revealed that image quality significantly influences perceived quality (β = 0.77, p=<0.001), supporting *H1*. This implies that if photos used in social media apply the rule of thirds, are clear, apply an equal visual weight horizontally and vertically, and use vibrant, intense, and pure colors, the customers' judgment of the overall excellence or superiority of a product increases. Considering that selling food online poses a limitation in stimulating the other senses of the customers apart from seeing, this result is useful to marketers and online food sellers because it ascertains the importance of maximizing the visual impact of using quality food photos in online selling to give an impression of excellent quality food product. Findings concur with the studies of Javeed et al. (2017), Quasem et al. (2016), and Teo et al. (2018), which also revealed that external cues influence perceived quality.

Findings also suggest that *H2* is supported because perceived quality was found to have a significant influence on purchase intention (β = 0.63, p=<0.001). This implies that the impression of excellence or quality that the customers have towards a food product influences their intention whether or not to buy the product online. This idea may serve as a guide to marketers and online food sellers, considering that their fundamental objective is to translate their posts into actual sales. These results concur with the findings of Ponnam and Balaji (2014), Qin et al. (2010), Asshidin et al. (2016), Shakeel (2014), and Setiawan et al. (2017), which also suggested that perceived quality has a significant influence on purchase intention.

Results of the analysis also found that image quality has a significant influence on purchase intention (β = 0.22, p=<0.001), supporting *H3*. This suggests that if the quality of images used in social media has appealing aesthetic features in consideration of the rule of thirds, clarity, intensity balance, saturation, and hue, there is a higher likeliness of positively influencing the purchase intention of the customers. Thus, marketers and online food sellers must ensure that the quality of food photos they use in selling food online aesthetically appeals to the customers to have a higher chance of translating it into an actual purchase. This result concurs with the findings of Pezoldt et al. (2014), Quasem et al. (2016), Teo et al. (2018), Yan et al. (2019), Dissanayake et al. (2019), Farook and Abeysekara (2016), and Suprapto et al. (2020), which also found that external quality cues have a significant influence on purchase intention.

For the mediating effect, it was revealed that perceived value has a significant mediating effect on

the relationship between image quality and purchase intention ($\beta = 0.484$, p=<0.001). Thus, *H4* is supported. This suggests that to translate image quality more effectively, marketers and online food sellers must exert an effort to create an impression that their food quality is excellent, thus influencing their purchase intention. Although image quality has a significant influence on purchase intention, it must also be noted that in reference to the path analysis, there is a higher coefficient if image quality translates into perceived quality, which translates into purchase intention. Thus, there is a higher likeliness of generating actual purchases. This finding agrees with the study of Yan et al. (2019), which suggested that perceived quality has a mediating role in the relationship between external quality cue and purchase intention.

Conclusion

This study revealed that food image quality has a significant influence on perceived quality and purchase intention, as well as perceived quality to purchase intention. Further, it ascertained that perceived quality has a mediating role between the relationship of image quality and purchase intention. Considering that the COVID-19 pandemic posed limitations on the ways and means of selling food, forcing marketers and sellers to migrate to online platforms, it is essential to understand the factors that may influence their customers to purchase their products. With the stiff competition in the food business, sellers must be conscious of the quality of photos they use on social media platforms. One must ensure that the photos have appealing aesthetic features by seeing to it that the food items are positioned in the intersection points of the grid following the rule of thirds. The position of the food in the photo must also be balanced vertically and horizontally. In terms of color, the photo must use vibrant and true tones because these are more appealing to customers.

Because of the mobility restrictions brought about by the pandemic, more customers rely on online shopping, thus the popularity of food delivery and online food selling. This change makes it imperative for food establishments to adapt to this new business landscape to sustain their business through the COVID-19 pandemic. Food companies must invest and engage knowledgeable and skilled food stylists, photographers, and graphic artists to ensure that the food images they use are attractive to customers, which may translate into purchases, as revealed by this study.

Implications, Limitations, and Directions for Future Research

Results of the study have implications for marketers and online food sellers, which may serve as their basis in assuring that food photos they use in selling food on online platforms will contribute a positive effect on the perceived quality of the product and, ultimately, the brand, which will translate into purchase intention. The study also contributes to the available literature because there are limited studies that tested image quality as cues, as well as the mediating role of perceived quality.

It must be noted that among the different factors, only image quality was tested as an external cue. In addition, the items and dimensions were also tested collectively as a construct. Thus, future researchers may explore other extrinsic cues that may contribute to perceived quality and purchase intention. Future researchers may also look into testing the model on a per dimension level.

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Appendix 1.

Survey Questionnaire

Dear Participants,

The following survey is part of my research project entitled "Facebook Marketplace: The relationship of image quality, perceived quality and purchase intention among selected online food businesses in the time of Covid-19 pandemic" as a faculty of the School of Hospitality and Tourism Management of Holy Angel University, Angeles City. This questionnaire will take you approximately 10 minutes to complete. This survey is voluntary and you may withdraw at any time, thus, disregarding your results. Rest assured that all information and answers provided will be treated with confidentiality and will only be used for academic purposes. Please note that this study may be published, but your name will not be used. In addition, return or submission of the questionnaire will be considered your consent to participate.

Demographics

Age:
Sex: Male   Female
City Municipality:
Have you accessed the Marketplace of Facebook recently?   Yes   No
How many times have you purchaced food
at the Marketplace of Facebook?   0   1   2   3   More   (Please indicates the
                                                                                                           number of times)

	Sample 1				Sample 2				Sample 3			
Image Quality	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree
1 Rule of Thirds. If an image is divided into nine equal regions by placing a 3x3 grid, the food is placed on the center.	4	3	2	1	4	3	2	1	4	3	2	1
2 Clarity. All the elements of the food in the photo are clear and visible.	4	3	2	1	4	3	2	1	4	3	2	1
3 Intensity Balance. The objects on the **left side and right side** of the photo are well balanced creating harmony in the photo	4	3	2	1	4	3	2	1	4	3	2	1
4 Intensity Balance. The objects on the **top and bottom** of the photo are well balanced creating harmony in the photo	4	3	2	1	4	3	2	1	4	3	2	1
5 Saturation. There is depth and intensity in the colors of the photo.	4	3	2	1	4	3	2	1	4	3	2	1
6 Hue. The photo uses pure (true) colors such as red, blue, yellow, orange, green, and violet.	4	3	2	1	4	3	2	1	4	3	2	1

Source: Yeh, M.C. & Cheeng, Y.C. (2012)

Image Quality	Sample 1				Sample 2				Sample 3			
	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree
1 Rule of Thirds. If an image is divided into nine equal regions by placing a 3x3 grid, the food is placed on the center.	4	3	2	1	4	3	2	1	4	3	2	1
2 Clarity. All the elements of the food in the photo are clear and visible.	4	3	2	1	4	3	2	1	4	3	2	1
3 Intensity Balance. The objects on the **left side and right side** of the photo are well balanced creating harmony in the photo	4	3	2	1	4	3	2	1	4	3	2	1
4 Intensity Balance. The objects on the **top and bottom** of the photo are well balanced creating harmony in the photo	4	3	2	1	4	3	2	1	4	3	2	1
5 Saturation. There is depth and intensity in the colors of the photo.	4	3	2	1	4	3	2	1	4	3	2	1
6 Hue. The photo uses pure (true) colors such as red, blue, yellow, orange, green, and violet.	4	3	2	1	4	3	2	1	4	3	2	1

Source: Yeh, M.C. & Cheng, Y.C. (2012)

Purchase Intention	Sample 1				Sample 2				Sample 3			
	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree	Strongly Agree	Partially Agree	Partially Disagree	Strongly Disagree
1 Given the chance, I predict that I will purchase the food product in the future.	4	3	2	1	4	3	2	1	4	3	2	1
2 It is likely that I will purchase the food posted online.	4	3	2	1	4	3	2	1	4	3	2	1
3 I will consider purchasing food posted online in the future.	4	3	2	1	4	3	2	1	4	3	2	1
4 The next time I will order food, it will definitely be those posted online.	4	3	2	1	4	3	2	1	4	3	2	1

Source: Saxena (2011)