

## The influence of perceived creativity and positive emotions on relationship quality: The mediating role of interaction

**Burhanudin<sup>1\*</sup>, Shinta Nufus Aulia<sup>2</sup>**

<sup>1,2</sup> Universitas Hayam Wuruk Perbanas, Indonesia

[burhanudin@perbanas.ac.id](mailto:burhanudin@perbanas.ac.id)

\*Correspondent Author

### ARTICLE INFORMATION

#### Article History

Received: 28-07-2023

Revised: 29-08-2023

Accepted: 30-08-2023

#### Keywords

Perceived Creativity;  
Positive Emotions;  
Relationship Quality;  
Interaction.

### ABSTRACT

Online grocery shopping offers a convenient shopping experience, but service providers must be creative in meeting customers' needs and delivering a positive shopping experience. This research examines the influence of perceived creativity and positive emotions on interaction and, subsequently, relationship quality. The study also analyses the mediation role of interaction in the relationship between perceived creativity and connection quality and the relationship between positive emotions and relationship quality. A survey was conducted with 288 respondents to investigate the relationships among the variables. The data collected were analyzed using structural equation modelling. The results show that perceived creativity and positive emotions directly influence relationship quality. Furthermore, perceived imagination and positive emotions indirectly affect relationship quality through interaction. These findings suggest that online grocery shopping platform providers can leverage consumers' creative perceptions and positive emotions to create exchanges that can be used to build a quality relationship between service providers and consumers.

This article has open access under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



### 1. Introduction

The online grocery shopping service business has promising prospects. The transaction value through online grocery shopping platforms in Indonesia reached US\$6 billion in 2025 from US\$1 billion in 2020 (Farah, 2021). Online grocery shopping habits in Indonesia have increased by 20% (Asti et al., 2021). Kurniasari & Riyadi (2021) said that a recent survey showed that 47% of users of online grocery shopping platforms are the younger generation who buy grocery products such as groceries, drinks, and other consumer goods. Furthermore, 76% of online shopping platform users will continue to use this method as a habit in shopping for needs (Kurniasari & Riyadi, 2021). This trend has become a driving force in the Indonesian economy. Thus, a further understanding of daily grocery shopping services is essential.

People choose to switch to online grocery shopping systems because of their convenience. Various empirical studies have examined consumers' purchase intentions when shopping online from different marketing perspectives. Consumers continue their purchases when the expected quality aligns with what they receive (Rukmayanti & Fitriana, 2022). Trust in online grocery shopping platforms and brand reputation influence purchase decisions (Maisaroh & Wibisono, 2022). Consumers tend to choose platforms that have a good reputation, are creative, and offer interactive services that can satisfy customers.

Perceived creativity is a crucial factor affecting customer satisfaction with online grocery shopping platforms. Perceived creativity is the consumers' perception of the providers in their productivity and ability to generate ideas in offering their products (Casaló et al., 2021). Consumers' perception of creativity plays a vital role in determining the success and increase in sales for online grocery shopping platforms. To achieve sales success, service providers must face various challenges and competition among online grocery shopping platforms requires service providers to think creatively and innovatively. Consumers' creative perceptions of services will influence purchase decisions (Fadhila et al., 2020). Purchase decisions respond to customer satisfaction after experiencing the presented services (Zannuba & Prawitasari, 2022).

In addition to consumers perception of creativity, positive emotions play a significant role in online grocery shopping platforms. The positive emotions experienced by consumers during the shopping process can enhance customer satisfaction and loyalty (Amanah & Harahap, 2019). Positive emotions are the feelings that customers experience due to internal stimulation from the service provider (Yin, 2019). Internal stimulation can be successful depending on how service providers utilize their creative ideas to fulfil consumers' needs and desires. These creative ideas can attract consumers to interact through enjoyable experiences, creating a solid emotional bond (Casaló et al., 2021). This makes it easier for service providers to establish good relationships with consumers.

Positive interaction between customers and service providers is the key to shaping a good company image in the eyes of customers. Interaction involves one-way communication and responsive communication between service providers and customers who need assistance and information (Dorai et al., 2021). Effective, responsive and personalized communication can enhance customer satisfaction. Satisfaction is achieved when customers interact with service providers who can respond and answer questions effectively. Additionally, the ability of online grocery shopping platforms to provide relevant product recommendations that align with customers' intentions can create better relationships with customers (Zannuba & Prawitasari, 2022).

Once service providers understand perceived creativity, positive emotions and interaction, it becomes easier to establish relationship quality with customers. Building customer relationship quality is essential for service providers to maintain customer loyalty, which is a primary priority alongside acquiring new customers (Amanah & Harahap, 2019). Dorai et al. (2021) state that relationship quality is formed when customer expectations, goals, and desires are met. The relationship quality formed between service providers and customers tends to result in repeated purchases and customer recommendations to others. Studies examining variables other than relationship quality and interaction are limited (Hudson et al., 2016; Santouridis & Veraki, 2017; Snijders et al., 2018; Sheikh et al., 2019; Li, 2020; Antwi, 2021; Busalim et al., 2021; Dorai et al., 2021; Tajvidi et al., 2021; Wibowo et al., 2021; Thornberg et al., 2022). The current study addresses this issue.

This study examines the influences of perceived creativity and positive emotions on relationship quality directly and indirectly through interaction. This examination is critical both theoretically and practically. Theoretically, studies in the context of online grocery shopping platforms are limited (Casaló et al., 2021). Rajabi & Gharce (2022) stated that perceived creativity and positive emotions influence the success of online grocery shopping

platforms in competition. From a practical perspective, this study can serve as a benchmark for managers to investigate the relationship between perceived creativity, positive emotions, interactions, and relationship quality in online grocery shopping platforms. With a better understanding of these factors, managers can develop more effective strategies to enhance the customer experience and maintain a loyal customer base.

## 2. Literature Review and Hypothesis Development

### 2.1. Literature Review

#### 2.1.1. Theoretical Background

Social exchange theory can explain relationship quality. Social exchange theory which has a theoretical orientation from a philosophical and psychological perspective (Cook & Rice, 2006). The social exchange theory argues that there are similarities between social behaviour and individual behaviour. As social and individual beings, humans have certain behaviour that can influence or be influenced (Mighfar, 2015). As a result of this influencing or influenced behaviour, a social behaviour will emerge in interaction. When someone is interacting, they tend to respond to something consistently and stably. Social exchange theory has been studied in several contexts. Among these are e-tailing (Dorai et al., 2021), manufacturing companies (Li, 2020) and social commerce (Sheikh et al., 2019). Dorai et al. (2021) argue that social exchange theory can be the basis for developing relationships between consumers and companies. In e-tailing, special privileges and offers are given to consumers who shop frequently, creating a mutually beneficial relationship. Li (2020) argues that partnership style in manufacturing companies can be based on social exchange theory, where partnership style is part of relationship quality. Good relationship quality between companies can encourage knowledge transfer and improve innovation performance. Sheikh et al. (2019) argue that social exchange theory in social commerce allows consumers to provide mutual support.

#### 2.1.2. Perceived Creativity

Perceived creativity is essential for service providers to understand. Perceived creativity is consumers' perception of the online shopping platform provider's creativity in offering their products (Casaló et al., 2021). In understanding the creative process, service providers must first understand individual or consumer perceptions and subjective experiences of creativity (Casaló et al., 2021). An essential concept in perceived creativity is how service providers influence consumers' affective commitment and intention to interact after seeing content from social media accounts (Casaló et al., 2021). Creativity through social media can take the form of attractive feed layouts and informative content. This is because the visual nature of social media is a perceivable factor of creativity (Casaló et al., 2021). Another essential role of perceivable creativity is the positive response from consumers to the publication of content that can stimulate interaction between consumers and the related brand, thus building a solid relationship quality. Perceived creativity has been previously studied in internet-based electronic media. Previous research on perceived creativity focused on e-entrepreneurial intention (Abdelfattah et al., 2022). This research only pertains to e-entrepreneurial activities, one type of internet-based electronic media. Electronic media encompasses various types, such as e-commerce, e-tailers, online grocery shopping services, etc. However, research has yet to be conducted specifically on perceived creativity in the context of online grocery shopping services, making it essential to investigate. This study aims for service providers to understand what perceptions of creativity can enable consumers to build positive interactions through social media.

### **2.1.3. Positive Emotion**

Service providers must understand positive emotions as consumers' responses to the services provided. Positive emotions are positive feelings experienced by individuals related to a sense of happiness that arises from internal and external stimuli, reflecting events or experiences that align with their desires and evoke feelings of satisfaction, joy, pride, etc. (Yin, 2019). Internal stimuli originate from perceived creativity and positive emotions (Casaló et al., 2021). Positive emotions are conscious feelings (Yin, 2019). The conscious process involves joy that can be observed through facial expressions or consumer responses after purchasing. Positive emotions can be stimulated through brand publications on social media (Casaló et al., 2021). Consumer responses to brand products can take the form of positive ratings communicated through social media, triggering purchases and generating positive feelings when consumer expectations align with their desires (Zannuba & Prawitasari, 2022). Positive emotions can enhance consumers' perceptions of a brand during the purchasing process. Research on positive emotions has been conducted in the context of e-commerce (Pappas et al., 2017). This research states that e-commerce purchases increase due to positive emotions (Pappas et al., 2017). However, research on positive emotions in the context of online grocery shopping services has yet to be conducted. Most Indonesians use online grocery shopping services for their daily shopping needs, making conducting research in this area essential. Online shopping can evoke various emotions in consumers, both positive and negative. Negative emotions can decrease purchase intention; therefore, online personalization can be a persuasive strategy that leads to change and influences consumer behaviour (Pappas et al., 2017).

### **2.1.4. Interaction**

Interaction is essential for service providers to understand in order for customers to feel satisfied with the services provided (Pasi & Sudaryanto, 2021). Interaction is defined as communication between two individuals involving requests, inquiries, and feedback sent by the customer and explanations or responses from the organization that enable a pleasant shopping experience (Dorai et al., 2021). Interaction differs from marketing communication. Interaction is consumer or seller-initiated, while marketing communication is essentially seller-initiated (Dorai et al., 2021). Categories of interaction can be identified when customers need assistance in choosing products or information about policies and processes, and the company responds and provides the necessary answers to meet the customer needs (Dorai et al., 2021). Interaction has been studied in the context of online marketing. Jahng et al. (2007) focused on the interaction that occurs within e-commerce, while there are other online marketing platforms such as online grocery shopping services, e-tailers, etc. Online grocery shopping service is an online shopping application widely used by consumers, making it necessary to research its interaction. The critical role of interaction in online marketing significantly influences customer satisfaction (Srivastava & Kaul, 2014). The information customers require through online marketing relates to inquiries and complaints expected to be quickly and effectively responded to by the organization. Prompt response time and practical communication skills will improve customer satisfaction and foster good customer relationships.

### **2.1.5. Relationship Quality**

Understanding relationship quality is crucial for maintaining customer loyalty. Relationship quality refers to the extent to which customers express their overall assessment of the strength of the relationship between the customer and the service

provider (Busalim et al., 2021). Establishing relationships between customers and service providers is a primary focus of marketing (Wibowo et al., 2021). Building relationships through marketing communication can determine customer trust in the conveyed messages. Trust is one component of relationship quality that can foster customer loyalty towards a product or brand (Wibowo et al., 2021). Customer trust enables a brand to have loyalty and results from a strong relationship quality. Research has been conducted on relationship quality in e-commerce. Lee et al. (2012) and Dorai et al. (2021) focused on maintaining relationship quality to ensure customer loyalty towards products or brands in e-commerce. Research on relationship quality must be conducted in online grocery shopping services to determine if the services provided align with customer expectations, thus creating a quality relationship. Relationship quality is a crucial factor in establishing positive relationships. Positive responses from customers will cultivate loyalty towards a brand, purchase intentions, and intentions to engage in social commerce (Wibowo et al., 2021).

## **2.2. Hypothesis Development**

### **2.2.1. The Influence of Perceived Creativity on Relationship Quality**

E-grocery service providers must comprehend consumers' creativity to fortify customer relationships (Casaló et al., 2021). The perceived creativity of consumers hinges on the creativity level exhibited by online grocery shopping platform service providers. This assumption arises from consumers' sense that innovative service providers possess the ability to craft engaging experiences within a relationship (Wibowo et al., 2021). Consumer interest can stem from imaginative features, intelligent purchasing suggestions, and innovative personalization by delivering creative services. Research investigating the impact of perceived creativity on relationship quality has not been undertaken previously (Wibowo et al., 2021), particularly in the context of online grocery shopping platforms. This gap serves as the foundation for this study, which aims to scrutinize the effect of perceived creativity on relationship quality. This study argues that perceived creativity has a significant effect on relationship quality. Wibowo et al. (2021) posit that consumers' creative perceptions can influence relationship quality. The relationship quality hinges on how adeptly the service provider conveys creative messages to captivate consumer interest (Wibowo et al., 2021). Consumers are more prominently drawn to online grocery shopping platform service providers who exhibit high creativity in offering fresh and engaging ideas, fostering a willingness to cultivate long-term relationships. Nadeem et al. (2020) argue that improving consumer creativity perceptions is essential for establishing a high-quality relationship with consumers. From the above viewpoint, it can be concluded that perceived creativity significantly affects relationship quality.

#### **H<sub>1</sub>: Perceived Creativity Significantly Influence Relationship Quality**

### **2.2.2. The Influence of Positive Emotion on Relationship Quality**

Service providers must prioritize customer satisfaction by evoking positive emotions to foster high-quality relationships (Bayuardie et al., 2023). Positive emotions are elicited when service providers can deliver a pleasant buying experience (De Kerviler & Rodriguez, 2019). Consumers who experience happiness, contentment, or excitement during purchase tend to develop a more robust emotional connection with online grocery shopping platforms. Positive emotions also hold the power to shape consumers' perceptions of product quality, service, and the efficiency of the purchasing process, thereby contributing to a positive overall experience (De Kerviler & Rodriguez, 2019). The influence of positive emotions on relationship quality has yet to be explored



in preceding research (De Kerviler & Rodriguez, 2019), particularly in the context of online grocery shopping platforms. Previous research argues that positive emotions have a significant effect on relationship quality. De Kerviler & Rodriguez (2019) assert that pleasant experiences perceived by consumers possess the potential to cultivate strong relationship quality. Positive emotions stemming from consumer experiences during the shopping process can significantly impact relationship quality (Casaló et al., 2021). The greater the number of positive experiences delivered to consumers through services, the higher the likelihood they will sustain long-term relationships. Consequently, it can be inferred that positive emotions wield a notable effect on relationship quality.

### **H<sub>2</sub>: Positive Emotion Significantly Influence Relationship Quality**

#### **2.2.3. The Influence of Perceived Creativity on Interaction**

Maintaining a good relationship with customers requires further understanding of the influence of perceived creativity on interaction. The competition among providers of daily consumer products, such as online grocery shopping services, is intense, making consumers' perception of the creativity of online grocery shopping service providers crucial. The range of products offered and payment options are examples of the creativity that online grocery shopping service providers need to employ. Consumers vary significantly in their perception of the creativity displayed by product providers, and this can be understood by analyzing the perceived interaction between consumers and service providers. Previous research has examined the impact of perceived creativity on interaction (Casaló et al., 2021), but it was limited to Instagram users in the fashion product context. This study argues that perceived creativity significantly influences interaction. Casaló et al. (2021) state that the perception of creativity is essential in marketing campaigns to generate good interactions. Marketing campaigns can be conducted through social networks, which enable interactions due to the published content (Casaló et al., 2021). Brand-related posts on social networks can serve as stimuli that trigger further responses. Rajabi & Gharce (2022) express that creative content ideas such as captions, images, and others can significantly affect interactions. Based on the arguments above, it can be concluded that perceived creativity has the potential to influence interaction.

### **H<sub>3</sub>: Perceived Creativity Significantly Influence Interaction**

#### **2.2.4. The Influence of Positive Emotion on Interaction**

Trust and customer loyalty towards a brand need to be enhanced by understanding the influence of positive emotions on interaction. Service providers can shape positive emotions through creatively published social media content, stimulating interactions (Casaló et al., 2021). Customers are more likely to respond positively by liking or commenting on brand posts and recommending them to others. The positive emotions experienced by customers will help develop positive interactions with brand content (Keiningham et al., 2018). Previous research shares similarities in examining the influence of positive emotions on interaction (Casaló et al., 2021), but not specifically in the context of online grocery shopping services. The findings from previous research state that positive emotions directly impact interaction. This is supported by prior research stating that positive emotions positively influence interaction (Casaló et al., 2021). The intention for interaction arises when consumers feel satisfied with the creative content provided by the service provider. Yoon et al. (2021) argue that it is essential for service providers to evoke positive emotions in consumers through creative marketing content, as it can encourage consumers to be more active and responsive.

Consumers actively engaged with a brand generate a stronger desire to participate and interact (Casaló et al., 2021).

**H<sub>4</sub>: Positive Emotion Significantly Influence Interaction**

**2.2.5. The Influence of Interaction on Relationship Quality**

Building a good company image requires further understanding of the influence of interaction on relationship quality. Online grocery shopping service providers need to understand that interaction goes beyond conveying product information; it involves assisting customers in selecting items or facilitating payment (Dorai et al., 2021). Consumers' perceived interactions include the service provider's response speed and communication abilities, which can influence satisfaction and foster good customer relationships (Tajvidi et al., 2021). Previous research has discussed the impact of interaction on relationship quality (Dorai et al., 2021), but it has been limited to the context of online retailers or e-tailers. The influence has yet to be examined in the context of online grocery shopping services, making it an essential area for investigation. The findings from previous research state a positive influence of interaction on relationship quality. Dorai et al. (2021) argue that interaction is an antecedent involving marketers and consumers that allows the formation of relationship quality. Relationship quality is formed when service providers and consumers can interact effectively, building emotional closeness that strengthens bonds and enhances satisfaction within the relationship. Srivastava & Kaul (2014) express that interaction drives customer satisfaction. Intensifying interaction impacts positive relationship quality, stimulating repeat purchases and word-of-mouth (Tajvidi et al., 2021). It can be concluded that interaction significantly influences relationship quality.

**H<sub>5</sub>: Interaction Significantly Influence Relationship Quality**

**2.2.6. The Influence of Perceived Creativity on Relationship Quality through Interaction**

It is essential to understand the influence of perceived creativity on relationship quality mediated by interaction. Perceived creativity is a crucial factor in building interaction (Casaló et al., 2021) and has the potential to fulfil a good relationship quality between consumers and service providers (Dorai et al., 2021). The influence of perceived creativity on relationship quality, mediated by interaction, in the online grocery shopping service context has not been examined. However, good relationship quality stems from customer satisfaction with creative services in online shopping platforms. This forms the foundation for this research to test the influence of perceived creativity on relationship quality mediated by interaction. This research argues that the influence of perceived creativity on relationship quality is mediated by interaction (Dorai et al., 2021). Wibowo et al. (2021) state that perceived creativity can enhance better relationship quality. Consumers who perceive creativity in the service offerings may contact the service provider to gain more information, which may enhance a better relationship between the consumers and the service provider. In other words, perceived creativity can lead to an interaction initiated by consumers rather than sellers, improving the relationship quality level. Nadeem et al. (2020) emphasize the importance of shaping consumers' perceptions of creativity to maintain good customer relationships. Based on the statements above, this research can formulate that perceived creativity influences relationship quality through interaction as a mediating variable.

**H<sub>6</sub>: Perceived Creativity Significantly Influence Relationship Quality through Interaction**

### 2.2.7. The Influence of Positive Emotion on Relationship Quality through Interaction

Further understanding the influence of positive emotions on relationship quality, mediated by interaction, is crucial. Positive emotions are a significant factor in eliciting interaction (Casaló et al., 2021) and are associated with forming good consumer relationships (Dorai et al., 2021). The positive emotions experienced by consumers will drive the formation of a good relationship quality through the interactions between consumers and service providers. The influence of positive emotions on relationship quality through interaction as a mediating variable has not been studied in the context of online grocery shopping service, even though consumer emotions are crucial for service providers to enhance the closeness between consumers and service providers by engaging in positive interactions through social media. This research argues that interaction mediates the influence of positive emotions on relationship quality (Casaló et al., 2021). De Kerviler & Rodriguez (2019) suggest that good relationship quality is influenced by the consumers' experience with a brand that offers pleasure. Pleasure offered by the brand, such as creative content and well-designed product attributes, can stimulate consumers' intention to interact (De Kerviler & Rodriguez, 2019). The interaction between consumers and service providers can positively impact forming a good relationship quality (Dorai et al., 2021). Referring to the argument above, positive emotions significantly influence relationship quality through the mediation of interaction.

**H7: Positive Emotion Significantly Influence Relationship Quality through Interaction**

### 2.3. Research Framework

This study illustrated the above hypotheses in Figure 1. Figure 1 shows that this study proposes that perceived creativity and positive emotion directly influence relationship quality. Apart from examining the direct influence, this study examines the indirect influences. In particular, this study proposes that perceived creativity indirectly influences relationship quality through interaction. In addition, this study proposes that positive emotion indirectly influence relationship quality through interaction.

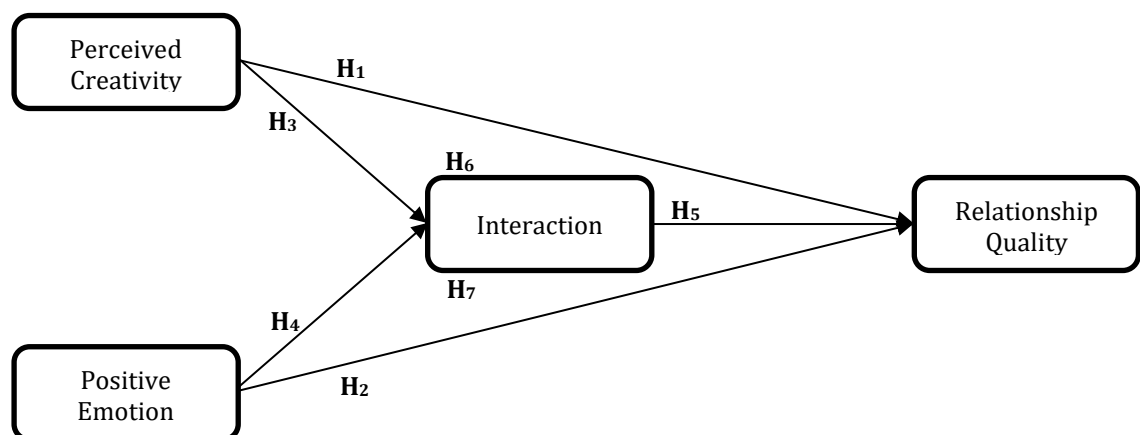


Figure 1. Research Framework

### 3. Research Method

Online grocery shopping service has emerged as a new trend in people's habits for fulfilling their daily needs due to its convenience, practicality, and efficiency. Many consumers feel assisted by the comfort and benefits of online grocery shopping services because they can obtain necessary items without leaving their homes (Ulrich et al., 2021). The convenience



experienced by consumers extends beyond the ease of ordering; it also includes the facilitated delivery of goods. Consumers can utilize features in online grocery shopping service apps for home delivery at their chosen time, eliminating the need to visit physical stores (Ulrich et al., 2021). Online grocery shopping service applications encompass various types, such as Klik Indomaret. These applications serve as a connection between consumers and suppliers of quality food products.

Previous research on relationship quality has mainly focused on e-commerce Lee et al. (2012) and e-tailers Dorai et al. (2021). Therefore, the current study focuses explicitly on online grocery shopping services. The respondent in this study were customers of online grocery shopping service applications such as Klik Indomaret. This study adopted a quantitative method to test hypotheses (Mulyadi, 2013). Data were collected using a non-probability sampling method by employing a convenience sampling technique (Miller et al., 2010).

The questionnaire items were adapted from previous studies. Perceived creativity (PC) was measured using three question items from Casaló et al. (2021). Positive emotion (PE) were measured using six question items from Casaló et al. (2021). The interaction (INT) was measured using three question items from Dorai et al. (2021). Finally, relationship quality (RQ) was measured using nine question items from Busalim et al. (2021).

The indicators used in this study employed a Likert scale ranging from 1 to 7 points, where 1 represents (Strongly Disagree), 2 represents (Disagree), 3 represents (Slightly Disagree), 4 represents (Neutral), 5 represents (Moderate), 6 represents (Agree), 7 represents (Strongly Agree) (Preston & Colman, 2000). The survey was distributed using the Google Forms application and shared through various social media platforms, including WhatsApp and Instagram. A total of 288 respondents participated in the survey. The data were analyzed using Smart PLS 3.0 to test the research instruments and hypotheses. The instrument validity was assessed through convergent and discriminant validity tests, followed by reliability testing.

Respondents in this study have specific characteristics. Regarding age, the majority of respondents are between 21 - 25 years (50.3%), followed by 16 - 20 years (18.4%), above 35 years (12.8%), 31 - 35 years (10.8%), 26 - 30 years (6.3%), lastly less than 15 years (1.4%). Regarding gender, most respondents are women (67.7%) than men (32.3%). Regarding finished education, the majority of respondents are bachelor's (49.7%), followed by high school graduates (38.2%), associate's degree (5.6%), master's degree (5.2%), and doctoral degree (3%), lastly lower than high school graduates (1%). One characteristic is the increase in online grocery shopping platform services, which young consumers in Indonesia dominate (Kurniasari & Riyadi, 2021).

## 4. Results and Discussion

### 4.1. Validity Test

This study evaluated the measurement mode in several stages to ensure the validity and reliability of the questionnaire items. The first step was eliminating variables with loading factor value below 0.7 (Hair et al., 2019). A loading factor value above 0.7 is highly recommended because the variable can explain more than 50% of the indicators's variance. In contrast, variables with loading factor below 0.7 are considered unacceptable (Hair et al., 2019). The next step involves the reflective measurement of indicators in this study using the average variance extracted (AVE) method to indicate convergent validity.

**Table 1. Validity Test Result**

Variable	Indicator	Loading Factor	AVE
Interaction	INT 1	0.907	0.819
	INT 2	0.898	
	INT 3	0.909	
Perceived Creativity	PC 1	0.864	0.666

Variable	Indicator	Loading Factor	AVE
Positive Emotion	PC 2	0.830	0.760
	PC 3	0.750	
	PE 1	0.885	
	PE 2	0.909	
	PE 3	0.872	
	PE 4	0.886	
Relationship Quality	PE 5	0.900	0.698
	PE 6	0.769	
	RQ 1	0.800	
	RQ 2	0.817	
	RQ 3	0.817	
	RQ 4	0.818	
	RQ 5	0.860	
	RQ 6	0.842	
	RQ 7	0.855	
RQ 8	0.844		
RQ 9	0.863		

Source: Primary Data Processing

The data processing results in Table 1 show that all the relevant variables have loading factor above 0.7. Therefore, all variables demonstrate more than 50% indicator variance and indicate that each item is reliable (Hair et al., 2019). Each variable must have an AVE value above 0.5 as an acceptance criterion or higher, indicating that the construct explains at least 50% of the item's variance (Hair et al., 2019). Table 2 shows that the AVE values of each variable are above 0.5, supporting the convergent validity of the constructs (Hair et al., 2019). The following testing phase assesses the internal consistency reliability, measured by Cronbach's alpha and composite reliability. These reliability measures' recommended and acceptable values are above 0.7 (Hair et al., 2019).

#### 4.2. Reliability Test

**Table 2. Reliability Test Result**

Variable	Cronbach's Alpha	Composite Reliability
Interaction	0.889	0.931
Perceived Creativity	0.748	0.856
Positive Emotion	0.936	0.950
Relationship Quality	0.946	0.954

Source: Primary Data Processing

Table 2 shows that each variable has Cronbach's alpha and composite reliability values ranging from 0.748 to 0.954. This indicates that the values of each variable are by the recommended and acceptable value above 0.7, indicating internal consistency reliability (Hair et al., 2019). The next is a discriminant validity test, which is helpful to determine whether a variable is empirically different from another variable. This assessment is based on the criterion that the square root of each composite reliability is greater than the correlation between a variable and other variables (Fornell & Larcker, 1981). Table 3 demonstrates that the criteria for discriminant validity are met. Thus, it can be concluded that all research variables are empirically different (Fornell & Larcker, 1981)

**Table 3. Discriminant Validity Test Result**

Variable	1	2	3	4
Interaction	<b>0.905</b>			
Perceived Creativity	0.636	<b>0.816</b>		

Variable	1	2	3	4
Positive Emotion	0.707	0.699	<b>0,872</b>	
Relationship Quality	0.835	0.683	0,779	<b>0,835</b>

Source: Primary Data Processing

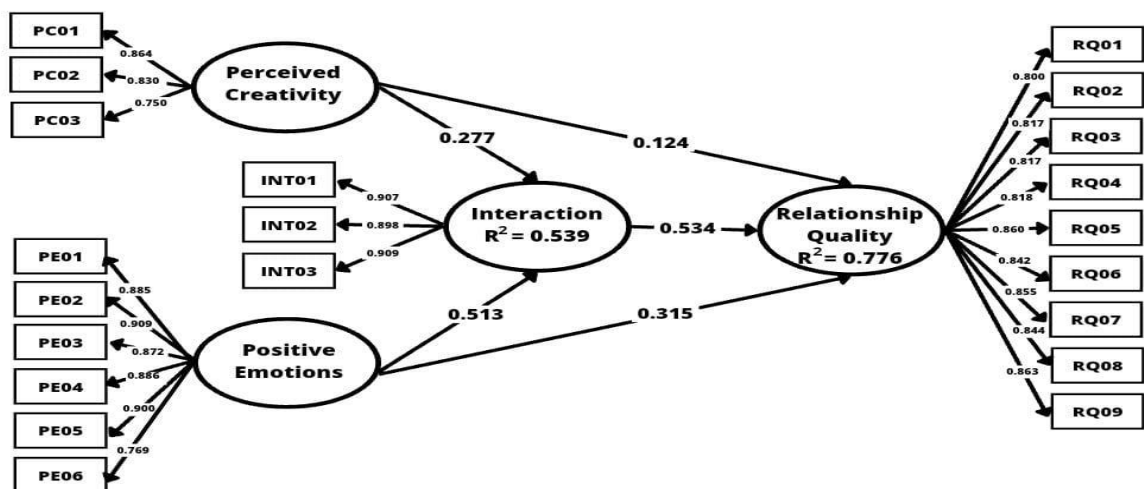
### 4.3. Hypothesis Test

The results of the structural model evaluation presented in Table 4, as illustrated in Figure 2, support all hypotheses. The results of hypothesis testing can be seen through the p value. The hypothesis is accepted if the p value is less than 0.05 (Ghozali, 2008). Perceived creativity significantly influences relationship quality ( $0.004 \leq 0.05$ ); thus, the first hypothesis is supported. Positive emotions significantly influence relationship quality ( $0.000 \leq 0.05$ ); thus, the second hypothesis is supported. Perceived creativity significantly influences interaction ( $0.000 \leq 0.05$ ); thus, the third hypothesis is supported. Positive emotions significantly influence interaction ( $0.000 \leq 0.05$ ); thus, the fourth hypothesis is supported. Interaction significantly influences relationship quality ( $0.000 \leq 0.05$ ); thus, the fifth hypothesis is supported. Perceived creativity significantly affects relationship quality through interaction ( $0.002 \leq 0.05$ ); thus, the sixth is supported. Positive emotions significantly affect relationship quality through interaction ( $0.000 \leq 0.05$ ); thus, the seventh hypothesis is supported.

**Table 4. Hypothesis Test Result**

Hypothesis	Direct Effect	Indirect Effect	P Value	Conclusion
Perceived Creativity → Relationship Quality	0.124	-	0.004	Supported
Positive Emotions → Relationship Quality	0.315	-	0.000	Supported
Perceived Creativity → Interaction	0.277	-	0.000	Supported
Positive Emotions → Interaction	0.513	-	0.000	Supported
Interaction → Relationship Quality	0.534	-	0.000	Supported
Perceived Creativity → Interaction → Relationship Quality	-	0.148	0.002	Supported
Positive Emotions → Interaction → Relationship Quality	-	0.274	0.000	Supported

Source: Primary Data Processing



**Figure 2. Result of Structural Model Assessment**

#### **4.4. Discussion**

Digital transformation has revolutionized every aspect of life and business in Indonesia. Online grocery shopping service is part of the digital transformation that has changed the shopping habits of Indonesian Society. The growth of online shopping platforms such as online grocery shopping services has led companies to adopt new technologies such as digital services and payments, thereby enhancing the quality of services and innovation within these companies. This highlights the importance of understanding online grocery shopping services. Research on relationship quality still needs to be improved outside the context of online grocery shopping services. This study was conducted in line with the recommendations made in previous research (Casaló et al., 2021; Dorai et al., 2021; Rajabi & Ghariche, 2022). This research provides insights into managing online grocery shopping services to attract consumer interest and build strong relationships with consumers. This study has five critical findings related to these aspects.

##### **4.4.1. Perceived Creativity Significantly Influence Relationship Quality**

The outcomes of this study align with the research conducted by Wibowo et al. (2021). The distinction lies in the focus of this research on e-grocery users in Indonesia, while Wibowo et al. (2021) concentrate on social media marketing within the same country. Perceived creativity emerges as a pivotal factor that can be harnessed to cultivate high relationship quality. This discovery assumes significance by demonstrating the consistent impact of perceived creativity on relationship quality. The assumption arising from consumers' perceived creativity implies that creative service providers are perceived as capable of delivering a more enjoyable experience. The characteristics of the respondents in this study, predominantly having made purchases exceeding two times, confirm that the creative approaches of service providers can indeed nurture a high-quality relationship between consumers and service providers, motivating consumers to engage in repeat purchases. This observation aligns with Nadeem et al. (2020), which emphasizes the significance of service providers enhancing their creativity to establish robust relationships with consumers.

##### **4.4.2. Positive Emotion Significantly Influence Relationship Quality**

The outcomes of this study align with the research conducted by De Kerviler & Rodriguez (2019). The distinction lies in the contextual focus, with this study centring on e-grocery users in Indonesia. In contrast, prior research by De Kerviler & Rodriguez (2019) centered around luxury brands in the United States. Goetz et al. (2021) examined positive emotional dynamics between teachers and students in Swiss schools. The findings of this study also corroborate the assertions of Bayuardie et al. (2023), underscoring that positive emotion function as a driving force in shaping robust relationship quality. This observation holds significance as it demonstrates the consistency in consumer behaviour consumers who encounter a pleasant buying process are more inclined to establish enduring relationships.

##### **4.4.3. Perceived Creativity Significantly Influence Interaction**

The findings of this study are consistent with the research conducted by Casaló et al. (2021) and Rajabi & Ghariche (2022). The difference in this research is its focus on online grocery shopping service users in Indonesia. In contrast, Casaló et al. (2021) focused on fashion brand Instagram users in the United States and the United Kingdom, and Rajabi & Ghariche (2022) focused on sports store Instagram users. Perceived creativity is an essential factor that can stimulate the intention to interact between consumers and online shopping platform providers. The diverse perceptions of

consumer creativity and the service provider's ability to meet them will create a pleasant shopping experience. These findings are significant as they indicate consistent evidence of the influence of perceived creativity in enhancing interaction. The respondents in this study were predominantly young individuals between the ages of 21 - 25, emphasizing the importance of service provider creativity, such as the variety of products sold and payment options that provide convenience and are highly favoured by young people. This is in line with Ryadi et al. (2021), which states that a focus on creativity can enhance the benefits perceived by consumers.

#### **4.4.4. Positive Emotion Significantly Influence Interaction**

The findings of this study are consistent with the research conducted by Casaló et al. (2021). The difference lies in the research context, where this study focuses on online grocery shopping service users in Indonesia. Previous studies, such as Casaló et al. (2021), focused on fashion brand Instagram users in the United States and the United Kingdom. Du et al. (2019) focused on the context of natural positive emotions among students in China. The findings of this study also confirm Weng & Zhao's (2020) assertion that positive emotions are an essential factor in building interaction between consumers and online shopping platform providers. These findings are significant as they demonstrate consistent consumer behaviour, where consumer satisfaction and positive feelings towards online shopping platforms that provide good products and services lead to positive responses towards the service providers. The respondents in this study were predominantly consumers who used online shopping platforms more than twice, emphasizing the importance of maintaining positive emotions among consumers through creative marketing content, easy accessibility, and payment methods. This aligns with Yoon et al. (2021), which states the importance of evoking positive emotions in consumers through creative marketing content to make them more active and responsive.

#### **4.4.5. Interaction Significantly Influence Relationship Quality**

The findings of this study align with the research conducted by Dorai et al. (2021) and Tajvidi et al. (2021). This study differs regarding the context of online grocery shopping service users in Indonesia. Previous studies, such as Dorai et al. (2021), focused on e-tailing users in India, while Tajvidi et al. (2021) focused on the context of e-commerce website users in China. The findings of this study also confirm Singh & Srivastava (2019) assertion that interaction is an essential element in building relationship quality on online shopping platforms. These findings are significant as they indicate consistent user behaviour on online shopping platforms, where users respond to effective interaction by being willing to establish good relationships with service providers. The respondents were predominantly consumers of online grocery shopping services who experienced good service and interaction (such as accessible communication quick and efficient responses), which are mostly sought after by consumers. This aligns with Singh & Srivastava's (2019) statement regarding fostering customer satisfaction through online contexts for better relationship quality.

#### **4.4.6. Perceived Creativity Significantly Influence Relationship Quality through Interaction**

The findings of this study are consistent with the research conducted by Casaló et al. (2021), which states the relationship between perceived creativity and interaction, and Dorai et al. (2021), which states the relationship between interaction and relationship quality. This study differs regarding the context of online grocery shopping



service users in Indonesia. Casaló et al. (2021) focused on the context of fashion brand Instagram users in the United States and the United Kingdom, while Dorai et al. (2021) focused on the context of e-tailing users in India. The connection between consumer perceptions of creativity and service providers can create good customer relationship quality through interaction. These findings are significant because creativity is a determinant of customer satisfaction that triggers the establishment of sustainable relationships. This study demonstrates the influence of perceived creativity on relationship quality through the mediation of interaction.

#### **4.4.7. Positive Emotion Significantly Influence Relationship Quality through Interaction**

The findings of this study are consistent with Casaló et al. (2021), which states the influence of positive emotions on interaction, and Dorai et al. (2021), which states the relationship between interaction and relationship quality. This study differs regarding the context of online grocery shopping service users in Indonesia. Previous studies, such as Casaló et al. (2021), focused on the context of fashion brand Instagram users, while Dorai et al. (2021) focused on the context of e-tailing users. Positive emotions that consumers experience through creative content provided by service providers can encourage consumers to establish good relationships through interaction. These findings are significant because consumers who experience positive emotions through a brand can drive word-of-mouth and increase the brand's likelihood of being top of mind for consumers. This study provides findings demonstrating the relationship between positive emotions and relationship quality mediated by interaction.

## **5. Conclusion and Suggestion**

### **5.1. Conclusion**

The results of this study have both theoretical and managerial contributions. Theoretically, this study contributes to the scarcity of research on determining good consumer interactions (Casaló et al., 2021). Currently, research on relationship quality in the context of online grocery shopping is limited to e-tailing (Dorai et al., 2021), social commerce (Sheikh et al., 2019; Tajvidi et al., 2021), and e-commerce (Antwi, 2021; Busalim et al., 2021). Furthermore, this study contributes to marketing literature on positive emotions as driving forces in forming interaction intentions (Casaló et al., 2021). Research on positive emotions is limited to behavioural intention (Huang et al., 2013; Lin et al., 2020). Managerially, this study contributes to creating marketing strategies for online shopping platforms. Service providers of online shopping platforms can leverage perceived creativity to enhance interaction. They need to harness creativity to shape consumers' perceptions, which is the foundation for building more robust engagement. Furthermore, they must provide training to improve service providers' creative skills. Managers' efforts in enhancing consumers' creativity will make it easier to shape consumers' perceived creativity and ultimately improve relationship quality. In addition, they can utilize the influence of positive emotions as a strategy to increase user engagement.

### **5.2. Suggestion**

This study has limitations which provide future research suggestions. This study used a convenience sampling technique. As a non-probability sampling method, such a sampling technique limits the generalization of the findings. Thus, future research may consider probability sampling methods such as systematic random sampling to increase the generalization of the findings. Furthermore, this study used a survey to examine the relationships among the investigated variables. Thus, future research may use experiments

to simulate perceived creativity and positive emotions. Future research may use laboratory or field experiments in such a suggested method. In addition, this study is limited to perceived creativity (Casaló et al., 2021), positive emotions (Casaló et al., 2021), and interaction to advance the understanding of relationship quality (Dorai et al., 2021). There could be other variables contributing to a greater understanding of relationship quality. Thus, future research may focus on other variables than the currently investigated variables relating to better explain relationship quality. Finally, this study focuses on online grocery shopping. Relationship quality may differ from one context to another. Thus, future studies may focus on other contexts than online grocery shopping.

## References

- Abdelfattah, F., Al Halbusi, H., & Al-Brwani, R. M. (2022). Influence of Self-Perceived Creativity and Social Media Use in Predicting E-entrepreneurial Intention. *International Journal of Innovation Studies*, 6(3), 119–127. <https://doi.org/10.1016/j.ijis.2022.04.003>
- Amanah, D., & Harahap, D. A. (2019). Loyalitas Konsumen: Implikasi dari Diferensiasi Produk dan Nilai Emosional. *Jurnal Ilmiah Manajemen Dan Bisnis*, 20(1), 15–26. <https://doi.org/10.30596/jimb.v20i1.2991>
- Antwi, S. (2021). “I Just Like This E-Retailer”: Understanding Online Consumers Repurchase Intention From Relationship Quality Perspective. *Journal of Retailing and Consumer Services*, 61. <https://doi.org/10.1016/j.jretconser.2021.102568>
- Asti, W. P., Handayani, P. W., & Azzahro, F. (2021). Influence of Trust, Perceived Value, and Attitude on Customers’ Repurchase Intention for E-Grocery. *Journal of Food Products Marketing*, 27(3), 157–171. <https://doi.org/10.1080/10454446.2021.1922325>
- Bayuardie, D., & Nisa, P. C. (2023). Hubungan antara Emotional Intelligence, Kualitas Layanan, Kepuasan Pelanggan, dan Loyalitas Pelanggan pada Karyawan Kedai Makanan dan Minuman. *Journal of Advances in Digital Business and Entrepreneurship*, 2(02), 1-17.
- Busalim, A. H., Ghabban, F., & Hussin, A. R. C. (2021). Customer Engagement Behaviour on Social Commerce Platforms: An Empirical Study. *Technology in Society*, 64. <https://doi.org/10.1016/j.techsoc.2020.101437>
- Casaló, L. V., Flavián, C., & Ibáñez-Sánchez, S. (2021). Be Creative, My Friend! Engaging Users on Instagram by Promoting Positive Emotions. *Journal of Business Research*, 130, 416–425. <https://doi.org/10.1016/j.jbusres.2020.02.014>
- Cook, K. S., & Rice, E. (2006). *Handbook of Social Psychology: Social Exchange Theory*. University of Wisconsin Madison. <https://doi.org/10.1007/0-387-36921-x>
- De Kerviler, G., & Rodriguez, C. M. (2019). Luxury Brand Experiences and Relationship Quality for Millennials: The Role of Self-Expansion. *Journal of Business Research*, 102. <https://doi.org/10.1016/j.jbusres.2019.01.046>
- Dorai, S., Balasubramanian, N., & Sivakumaran, B. (2021). Enhancing Relationships in E-tail: Role of Relationship Quality and Duration. *Journal of Retailing and Consumer Services*, 58. <https://doi.org/10.1016/j.jretconser.2020.102293>
- Du, J., An, Y., Ding, X., Zhang, Q., & Xu, W. (2019). State Mindfulness and Positive Emotions in Daily Life: An Upward Spiral Process. *Personality and Individual Differences*, 141(122), 57–61. <https://doi.org/10.1016/j.paid.2018.11.037>
- Fadhila, S., Lie, D., Wijaya, A., & Halim, F. (2020). Pengaruh Sikap Konsumen dan Persepsi Konsumen Terhadap Keputusan Pembelian pada Mini Market Mawar Balimbingan. *SULTANIST: Jurnal Manajemen dan Keuangan*, 8(1), 53–60. <https://doi.org/10.37403/sultanist.v8i1.177>

- Farah, H. (2021). *Pergeseran Perilaku, Dorong Pertumbuhan Layanan E-Groceries Indonesia*. Katadata. <https://katadata.co.id/ekarina/infografik/617a6a52e2fb1/pergeseran-perilaku-dorong-pertumbuhan-layanan-e-groceries-indonesia>
- Fornell, C., & Larcker, D. (1981). Mengevaluasi Model Persamaan Struktural dengan Variabel yang Tidak Dapat Diamati dan Kesalahan Pengukuran. *Jurnal Riset Pemasaran*, 18, 39–50.
- Ghozali, I. (2008). *Structural Equation Modeling: Metode Alternatif Dengan Partial Least Square (PLS)*. Badan Penerbit Universitas Diponegoro.
- Goetz, T., Bieleke, M., Gogol, K., van Tartwijk, J., Mainhard, T., Lipnevich, A. A., & Pekrun, R. (2021). Getting Along and Feeling Good: Reciprocal Associations between Student-Teacher Relationship Quality and Students' Emotions. *Learning and Instruction*, 71. <https://doi.org/10.1016/j.learninstruc.2020.101349>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report The Results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Huang, Y. C., Backman, S. J., Backman, K. F., & Moore, D. W. (2013). Exploring User Acceptance of 3D Virtual Worlds in Travel and Tourism Marketing. *Tourism Management*, 36, 490–501. <https://doi.org/10.1016/j.tourman.2012.09.009>
- Hudson, S., Huang, L., Roth, M. S., & Madden, T. J. (2016). The Influence of Social Media Interactions on Consumer-Brand Relationships: A Three-Country Study of Brand Perceptions and Marketing Behaviors. *International Journal of Research in Marketing*, 33(1), 27–41. <https://doi.org/10.1016/j.ijresmar.2015.06.004>
- Jahng, J., Jain, H., & Ramamurthy, K. (2007). Effects of Interaction Richness on Consumer Attitudes and Behavioral Intentions in E-Commerce: Some Experimental Results. *European Journal of Information Systems*, 16(3), 254–269. <https://doi.org/10.1057/palgrave.ejis.3000665>
- Keiningham, T. L., Rust, R. T., Lariviere, B., Aksoy, L., & Williams, L. (2018). A Roadmap for Driving Customer Word-of-Mouth. *Journal of Service Management*, 29(1), 2–38. <https://doi.org/10.1108/JOSM-03-2017-0077>
- Kurniasari, F., & Ryadi, W. T. (2021). Determinants of Indonesian E-Grocery Shopping Behavior After Covid-19 Pandemic Using the Technology Acceptance Model Approach. *United International Journal for Research & Technology*, 3(01), 12-18.
- Lee, J., Lee, Y., & Lee, Y. J. (2012). Do Customization Programs of E-Commerce Companies Lead to Better Relationships with Consumers? *Electronic Commerce Research and Applications*, 11(3), 262–274. <https://doi.org/10.1016/j.elerap.2011.10.004>
- Li, G. (2020). The Impact of Supply Chain Relationship Quality on Knowledge Sharing and Innovation Performance: Evidence from Chinese Manufacturing Industry. *Journal of Business and Industrial Marketing*, 36(5), 834–848. <https://doi.org/10.1108/JBIM-02-2020-0109>
- Lin, H., Chi, O. H., & Gursay, D. (2020). Antecedents of Customers' Acceptance of Artificially Intelligent Robotic Device Use in Hospitality Services. *Journal of Hospitality Marketing and Management*, 29(5), 530–549. <https://doi.org/10.1080/19368623.2020.1685053>
- Maisaroh, S., & Wibisono, T. (2022). Pengaruh Media Sosial, Kepercayaan, dan Persepsi Manfaat terhadap Keputusan Pembelian Online. *Jurnal Fokus Manajemen Bisnis*, 12(1), 16–29. <https://doi.org/10.12928/fokus.v12i1.5708>
- Mighfar, S. (2015). Social Exchange Theory: Telaah Konsep George C. Homans Tentang Teori Pertukaran Sosial. *LISAN AL-HAL: Jurnal Pengembangan Pemikiran dan Kebudayaan*, 9(2), 259-282. <https://doi.org/10.35316/lisanalhal.v9i2.98>
- Miller, P. G., Johnston, J., Dunn, M., Fry, C. L., & Degenhardt, L. (2010). Comparing Probability and Non-Probability Sampling Methods in Ecstasy Research: Implications for The Internet as A Research Tool. *Substance Use and Misuse*, 45(3), 437–450. <https://doi.org/10.3109/10826080903452470>

- Mulyadi, M. (2013). Penelitian Kuantitatif dan Kualitatif serta Pemikiran Dasar Menggabungkannya. *Jurnal Studi Komunikasi Dan Media*, 15(1), 128. <https://doi.org/10.31445/jskm.2011.150106>
- Nadeem, W., Juntunen, M., Shirazi, F., & Hajli, N. (2020). Consumers' Value Co-Creation in Sharing Economy: The Role of Social Support, Ethical Perceptions and Relationship Quality. *Technological Forecasting and Social Change*, 151,. <https://doi.org/10.1016/j.techfore.2019.119786>
- Pappas, I. O., Kourouthanassis, P. E., Giannakos, M. N., & Chrissikopoulos, V. (2017). Sense and Sensibility in Personalized E-Commerce: How Emotions Rebalance the Purchase Intentions of Persuaded Customers. *Psychology and Marketing*, 34(10), 972–986. <https://doi.org/10.1002/mar.21036>
- Pasi, L. N. K., & Sudaryanto, B. (2021). Analisis Pengaruh Online Customer Reviews dan Kualitas Pelayanan terhadap Keputusan Pembelian dengan Kepercayaan sebagai Variabel Intervening (Studi pada Konsumen Shopee di Kota Semarang). *Diponegoro Journal of Management*, 10(4). <https://ejournal3.undip.ac.id/index.php/djom/article/view/32369>
- Preston, C. C., & Colman, A. M. (2000). Optimal Number of Response Categories in Rating Scales: Reliability, Validity, Discriminating Power, and Respondent Preferences. *Acta Psychologica*, 104(1), 1–15. [https://doi.org/10.1016/S0001-6918\(99\)00050-5](https://doi.org/10.1016/S0001-6918(99)00050-5)
- Rajabi, M., & Gharcheh, M. (2022). The Effect of Perceived Creativity of Sports Store Instagram Posts on the Interactive Intention of Followers With the Mediating Role of Affective Commitment. *Research in Sport Management and Marketing*, 3(3), 35-46.
- Rukmayanti, R., & Fitriana, F. (2022). Pengaruh Kualitas Produk, Harga, dan Promosi terhadap Keputusan Pembelian. *Jurnal Fokus Manajemen Bisnis*, 12(2), 206–217. <https://doi.org/10.12928/fokus.v12i2.6671>
- Ryadi, W. T., Kurniasari, F., & Sudiyono, K. A. (2021). Factors Influencing Consumer's Intention Towards E-Grocery Shopping: An Extended Technology Acceptance Model Approach. *Economics, Management and Sustainability*, 6(2), 146–159. <https://doi.org/10.14254/jems.2021.6-2.11>
- Santouridis, I., & Veraki, A. (2017). Customer Relationship Management and Customer Satisfaction: The Mediating Role of Relationship Quality. *Total Quality Management and Business Excellence*, 28(9–10), 1122–1133. <https://doi.org/10.1080/14783363.2017.1303889>
- Sheikh, Z., Yezheng, L., Islam, T., Hameed, Z., & Khan, I. U. (2019). Impact of Social Commerce Constructs and Social Support on Social Commerce Intentions. *Information Technology and People*, 32(1), 68–93. <https://doi.org/10.1108/ITP-04-2018-0195>
- Singh, S., & Srivastava, S. (2019). Engaging Consumers in Multichannel Online Retail Environment: A Moderation Study of Platform Type on Interaction of E-Commerce and M-Commerce. *Journal of Modelling in Management*, 14(1), 49–76. <https://doi.org/10.1108/JM2-09-2017-0098>
- Snijders, I., Rikers, R. M. J. P., Wijnia, L., & Loyens, S. M. M. (2018). Relationship Quality Time: The Validation of A Relationship Quality Scale In Higher Education. *Higher Education Research and Development*, 37(2), 404–417. <https://doi.org/10.1080/07294360.2017.1355892>
- Srivastava, M., & Kaul, D. (2014). Social Interaction, Convenience and Customer Satisfaction: The Mediating Effect of Customer Experience. *Journal of Retailing and Consumer Services*, 21(6), 1028–1037. <https://doi.org/10.1016/j.jretconser.2014.04.007>
- Tajvidi, M., Wang, Y., Hajli, N., & Love, P. E. D. (2021). Brand Value Co-Creation in Social Commerce: The Role of Interactivity, Social Support, and Relationship Quality. *Computers in Human Behavior*, 115. <https://doi.org/10.1016/j.chb.2017.11.006>
- Thornberg, R., Forsberg, C., Hammar Chiriak, E., & Bjereld, Y. (2022). Teacher–Student Relationship Quality and Student Engagement: A Sequential Explanatory Mixed-Methods

- Study. *Research Papers in Education*, 37(6), 840–859. <https://doi.org/10.1080/02671522.2020.1864772>
- Ulrich, M., Jahnke, H., Langrock, R., Pesch, R., & Senge, R. (2021). Distributional Regression for Demand Forecasting in E-Grocery. *European Journal of Operational Research*, 294(3), 831–842. <https://doi.org/10.1016/j.ejor.2019.11.029>
- Weng, D., & Zhao, J. (2020). Positive Emotions Help Rank Negative Reviews In E-Commerce. *arXiv preprint arXiv:2005.09837*. <https://doi.org/10.48550/arXiv.2005.09837>
- Wibowo, A., Chen, S. C., Wiangin, U., Ma, Y., & Ruangkanjanases, A. (2021). Customer Behavior as an Outcome of Social Media Marketing: The Role of Social Media Marketing Activity and Customer Experience. *Sustainability (Switzerland)*, 13(1), 1–18. <https://doi.org/10.3390/su13010189>
- Yin, J. (2019). Study on The Progress of Neural Mechanism of Positive Emotions. *Translational Neuroscience*, 10(1), 93–98. <https://doi.org/10.1515/tnsci-2019-0016>
- Yoon, J. K., Pohlmeier, A. E., Desmet, P. M. A., & Kim, C. (2021). Designing for Positive Emotions: Issues and Emerging Research Directions. *Design Journal*, 24(2), 167–187. <https://doi.org/10.1080/14606925.2020.1845434>
- Zannuba, S. H., & Prawitasari, D. (2022). Pengaruh Gaya Hidup dan Kualitas Pelayanan melalui Kepuasan Konsumen terhadap Minat Beli Ulang. *Jurnal Fokus Manajemen Bisnis*, 12(2), 176–193. <https://doi.org/10.12928/fokus.v12i2.6640>