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Factors Influencing Consumer Behavior towards Online Shopping in Saudi Arabia Amid COVID-19: Implications for E-Businesses Post Pandemic

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Abstract: The coronavirus disease 2019 (COVID-19) has significantly reshaped consumer behaviors in Saudi Arabia, as in most other countries worldwide, and it has played a critical role in rising commercial online activities. The purpose of this study is to test the factors affecting online shopping amid COVID-19 in Saudi Arabia. The five main factors identified from the literature review towards online shopping namely, product variety, convenience, payment method, trust, and psychological factors were analyzed and examined in the Saudi context. The research collected data online through a pre-tested instrument, which was directed to online Saudi consumers via different electronic tools, e.g., email and social media platforms. The results of a statistical analysis showed that only three factors have a direct significant impact on online shopping amid the COVID-19 pandemic. These factors were product variety, payment method, and psychological factors. Convenient and trust factors failed to have a significant impact on consumers' decisions to shop online amid COVID-19. Both factors were less important for consumers, since shopping online amid COVID-19 has become most common among people. The result will assist e-commerce businesses to better meet consumer demands by adjusting their marketing strategies, especially in times of crisis.

Keywords: COVID-19; consumer behavior; psychological factor; online shopping; Saudi Arabia

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1. Introduction

Since the outbreak of the coronavirus disease 2019 (COVID-19) in December 2019, online shopping in Saudi Arabia, as in most other countries worldwide, has become more common than ever before. The pandemic stimulated a downward trend in the economic performance as the entire population of the country went into quarantine. The government's health measurements aimed at stopping the spread of the virus have negatively affected the normal economic activity in the country. However, it has encouraged customers to devise innovate approaches for purchasing products and services. Since the COVID-19 flare-up, the Saudi government has been doing a great deal to shorten the spread of this infection by setting ban-related guidelines to limit gathering, through the suspension of communal working environments (Salem and Nor 2020). This suspension is enforced not only in the workplace, but also in government offices, schools, colleges, and stores, which are all on either a full or partial lockdown. Severe time limitations have been put on all urban communities, while a large number of types of gathering have been viewed as unlawful, and a fine is imposed for abusing the mandate of the public authority. Sobaih and Moustafa (2022) agreed with Salem and Nor (2020) about the changes in buying behaviors during the implementation of the government measures to contain COVID-19 in Saudi Arabia.

In most nations, governments announced the temporary closure of businesses, such as coffee shops and malls, which led to a complete lockdown, causing significant economic

harm. The pandemic is expected to have a severe influence on shoppers' behaviors, and employee productivity. Market growth, rivalry, and financial interdependence are motivated by customers in every market. Purchasers are changing their behaviors as a result of the economic uncertainty. Some scholars (e.g., Salem and Nor 2020; Alflayyeh et al. 2020) argued that it is necessary to identify the factors that contribute to the adoption of e-commerce (i.e., online shopping) as an alternative to the brick-and-mortar shopping mode. According to Le Tan et al. (2021) there are five key factors that have been found that had a great influence on consumer attitudes during the pandemic: product diversity, convenience, payment method, trust, and psychological factors. One of the key benefits of online shopping is to provide more choices, in terms of time, shops, and product diversity.

Saudi consumers prefer traditional purchasing methods to online shopping platforms. Nonetheless, COVID-19 has significantly affected consumer purchasing choices across Saudi Arabia, where expenditures differ by the type of product, especially for basic necessities, such as food and home healthcare supplies (bint AbdulAziz Al-Khanini 2021). The Saudi Arabian government has been encouraging residents to use digital payment methods when completing transactional payments. Shopping from physical shops did not decrease drastically but citizens began developing a positive attitude towards the use of online shopping. The Saudi government has taken a lot of wise steps to prevent residents from leaving their homes for their safety.

Convenience played a major role in shaping the consumer-purchasing patterns, with most consumers switching from physical to online shopping. Internet purchasing in Saudi Arabia grew in comparison to physical shopping during the outbreak and due to the restrictions placed on people's movements (bint AbdulAziz Al-Khanini 2021). During the lockdown, the retail industry was already suffering from difficult challenges, where a sharp drop in sales for merchants forced them to shift their focus online and extend their ability to accept contactless and cashless payments, which encouraged most customers to shop online (Koch et al. 2020). Additionally, cash on delivery remains the most common and preferred form of payment in Saudi Arabia (Al-mani 2020). According to Alflayyeh et al. (2020) the lack of acceptable payment selections was one of the customer issues that was addressed the most while dealing with the online shopping platforms. These changes in consumer and company behaviors laid the groundwork for a significant shift in how business is conducted throughout the region (Illankoon 2020). Trust also plays a significant influence in consumer purchasing decisions because individuals usually choose brands and items they can trust. Challenges to the adoption of online purchasing in Saudi Arabia, where users feel that buying on the internet exposes them to a variety of security risks, such as credit card scammers, fewer transaction choices, confidentiality, privacy, lack of laws and regulations, and poor after-sales support. Buying from the internet is associated with issues related to security, privacy, and trustworthiness (Rehman 2019). Furthermore, consumer behaviors are considerably influenced by psychological factors. The psychological effects are a result of the many COVID-19 guidelines that were released globally, including in Saudi Arabia, to minimize some of the harmful effects of the pandemic. The psychological worry of catching COVID-19 and the scarcity of some products have led to the practice of collecting goods and buying more than what one needs, out of fears that they will not be available in the future (Abid et al. 2022).

Businesses around the world are adopting online shopping rapidly and taking full advantage of the many benefits that online marketplaces offer. The United States, followed by Europe, lead in e-commerce, accounting for around 79% of the global internet trade revenues (Alzahrani 2018). According to Béland et al. (2020), amid the COVID-19 outbreak, Amazon increased the number of delivery workers in the United States and Europe. E-shopping in Saudi Arabia is currently in the early stages of the country's IT revolution. The ICT market in Saudi Arabia is growing rapidly, but the online shopping segment has not grown at the same rate, where only 9% of firms in Saudi Arabia have implemented e-shopping platforms (Alzahrani 2018).

To the best of the researchers' knowledge, there is limited research explaining the factors that affected online shopping behaviors during the pandemic in Saudi Arabia (Salem and Nor 2020; Alflayyeh et al. 2020). The purpose of this study is to test the factors that influence customers' online purchasing decisions amid COVID-19 in Saudi Arabia. The identification of these indicators is thought to aid in directing Saudi Arabian customers' online purchasing preferences and proposing appropriate solutions during crises. The research questions of this study are: "what are the factors that affect online shopping in Saudi Arabia amid COVID-19? What is the implication for e-businesses post COVID-19?" The current research is an attempt to answer these research items. The research provides some insights for consumers' behaviors and e-businesses post COVID-19. To achieve the purpose and answer the research questions, the structure of the next sections of the paper starts with reviewing the literature on e-commerce and online consumer behaviors, especially in Saudi Arabia. Section 2 also reviews the effect of COVID-19 on online shopping among Saudis. Section 3 discusses the formulation of the research hypotheses. Section 4 shows the research approach adopted for the data collection and analysis. Section 5 presents the results of the study, which are discussed in Section 6. Section 7 presents the conclusions and limitations of the study.

2. Literature Review

2.1. E-commerce in Saudi Arabia

E-commerce or internet shopping is a form of commerce that enables consumers to purchase goods or services using a web search engine. Users are able to purchase online utilizing a variety of devices, such as desktops, tablets, and mobiles. There were different terms used to reflect this e-commerce, such as e-shopping, e-web-store, e-shop, e-store, internet shop, web-shop, web-store, online store, online storefront and virtual store. Online shopping refers to purchasing goods and services over the internet, also known as e-commerce (Fu et al. 2020). The Saudi Vision 2030 aims to expand Saudi Arabia's means of earnings and enhance non-oil earnings, in order to minimize the oil-dependent economy (Al-Maliki 2021). Additionally, Saudi Arabia's future expansion plan targets to increase the percentage of e-commerce transactions by 2030, up to 70 percent higher than in previous years (Jan et al. 2021). Over the past years, the economy of Saudi Arabia underwent an exceptional growth supported by the steady shift from offline shopping to internet shopping. In Saudi Arabia, the young population increased its broadband and smartphone perceptions, and the government's enhanced focus on e-commerce continues to drive the shift towards online purchasing. Although Saudi Arabian shoppers prefer the traditional shopping channels, online shopping continues to grow, due to the convenience of in-home deliveries (Albliwi 2021; Al-mani 2020).

2.2. Online Customer Behaviors in Saudi Arabia

Customer behavior is the study of the psychological, behavioral, and emotional processes that affect people's decisions about what they consume, how much they consume, and how frequently they place orders for products and services (Mothersbaugh et al. 2020). It refers to the study of people and their decision-making processes when buying products and services. Customer behavior determines the consumer attitude and motivations for purchasing and using products and services, including the frequency of purchase. Understanding customer behaviors before and after purchases, is aided by several disciplines, including economics and psychology. It also assists businesses in identifying new potentials (Qazzafi 2019). Online behavior is described as person's general perception and opinion for e-retail, which could be described in an optimistic or pessimistic way, or even in a psychological impression as good or bad (Baeva 2011). Different studies on consumer behaviors in Saudi Arabia (e.g., Nachar 2019; and Salem and Nor 2020) reported various factors that influence consumer behaviors in the country. Baabdullah and Ansari (2020) mentioned that Saudis' online spending depends on their confidence in online stores, where consumers often purchase goods at what they believe is a good price. Nachar (2019) found

that customers' intentions to embrace online shopping is predicted by the e-commerce platform simplicity of use and effectiveness technology. Valaskova et al. (2021), examined the changes in consumer buying behaviors, as a result of the COVID-19 pandemic. The pandemic affected different aspects of consumer behaviors in Slovakia. This included spending, investments and financial assets, and social and financial security. The study found that factors, such as customer income, age, and area of expertise, have a significant impact on buying behaviors.

Customer wants, desires, and loyalties are changing as a result of the electronic revolution, which has broken barriers and created an intense demand among retailers and service suppliers (Al-Ayed 2022). McKinsey (2018) conducted a Middle East sentiment survey and classified buyers into five main types, based on their behaviors: savvy cost-cutters, brand investors, trade-down converts, and selective and multichannel buyers. The term "savvy cost-cutters" refers to those who are budget-conscious and know how to save money. According to the survey, Saudi customers frequently come up with innovative solutions to save costs. Careful brand investors refers to those who are concerned about spending money or resources on a well-known brand for an extended amount of time. The result revealed that about 34% of Saudi Arabian consumers prefer to purchase their desired brands in stores with lower prices. Purchasing products that are less valuable than what the person presently has, such as a home or automobile, is referred to as trade-down conversions. The report showed that 54% of Saudi consumers are trading down to less expensive brands or luxury labels, resulting in a high satisfaction with merchandise and little desire to purchase costly items. Consumers in Saudi Arabia are selective in spending their income, progressively dividing their expenditures, by either moving up or down, where 11% of Saudi consumers trade up and 16% trade down. A multi-channel shopper is someone who shops across many online retail platforms before making a purchase. According to the survey, Saudi Arabian shoppers believe in comparing costs across many platforms, to save money. Overall Saudi consumers tend to be more cost-conscious and less brand loyal.

2.3. Impact of COVID 19 on Saudi Shopping

The COVID-19 pandemic has resulted in substantial shifts in consumer behaviors, not just in the Kingdom of Saudi Arabia, but also around the world. This led to an increasing turn towards digital channels (Salem and Nor 2020). Global restriction policies prevented customers from visiting stores or paying with cash. This led to a reduce in demand for goods and forced businesses to change their marketing strategies. Product shortages also make it difficult for online businesses to meet customer demands (Alessa et al. 2021, Jebril 2020). Since the outbreak of COVID-19, around 58% of US shoppers increased their online shopping experiences (Puttaiah et al. 2020). Hence, Salem and Nor (2020) argued that customers, during the pandemic in Saudi Arabia, changed their behaviors from in-stores shopping to online shopping. It was found that Saudi purchasers are concerned with online shopping safety and platform threats more than health considerations. It was argued that Saudi customers continued to shop in malls without fear of the pandemic affecting their health.

In a time of crisis, the government of Saudi Arabia helped incentivize the growth of online shopping by improving the regulatory framework. It implemented the e-commerce law to regulate digital payments (Al-Maliki 2021). E-commerce legislation and regulations have been developed by the Ministry of Commerce, to strengthen the control in important areas, such as disclosure laws, personal data protection, and consumer rights (Almalki 2021). The pandemic influenced Saudis' buying habits. Market players are shifting from the traditional in-store format towards the tech store. In 2019, the e-commerce industry was predicted to be worth approximately United States dollar (USD) $7.5 million. By 2024, it is anticipated to create an extra USD 8 billion revenue (Alkhunaizan and Ali 2022). According to Sharma (2020) and Alkhunaizan and Ali (2022), buyers' adaptations to online shopping was facilitated by the epidemic's boundaries.

3. Hypotheses Formulation

Some common elements have emerged as crucial indicators of consumer attitudes in Saudi Arabia, such as security, privacy, trust, lack of clear regulations, usefulness, and government support (Nachar 2019; and Salem and Nor 2020). Neger and Uddin (2020) stated that, in light of pandemic, it is crucial to examine the seven key factors when studying the variables that affect online purchasing behaviors, including product, price, time-cost, payment, administrative, security, and psychological factors. The study also showed that identifying and addressing online shopping concerns can attract new customers to online stores and increase the online shopping acceptance. From the above issues, a study of consumer buying behaviors will assist in determining the factors impacting consumer decision-making and revealing customers' usage patterns for e-shop platforms.

3.1. Product Variety Factor

The term "product" refers to any service or item offered by a manufacturer, producer, wholesaler, or retailer to the purchaser. Consumers purchase things on a regular basis, after serious consideration and comparison of products, based on cost, reliability, and design (Kotler and Armstrong 2010). Product variety refers to the availability of different items within a business's marketing platform, at the same time (Park et al. 2005). Each purchaser has a unique perspective on a product's suitability, price, and value. As a result, it is important for firms to provide a diverse choice of products to its clients (Pangaribuan et al. 2019). More product diversity provides a bigger fit of accessible items to the desired features for shoppers (Oertel 2020).

The unprecedented increase in the use of this technology in Saudi Arabia is attributed to the impact of COVID-19, that transformed the ways of doing business (Salem and Nor 2020). The belief held by consumers towards online purchasing influenced its acceptance in Saudi Arabia. The premise of this assumption is that beliefs and attitudes of customers are based on the knowledge they have about a product. The level of online consumer spending in Saudi Arabia is determined by the type of products offered by online retailers, as Aldaej (2019) mentioned that the types and the diversity of products and services offered in the electronic shops considerably determines how individuals and groups of Saudi online consumers spend or decide to purchase through online shopping. Product type influences consumer spending because it determines the perceived satisfaction and trust. Additionally, having a large selection of items gives the buyer a variety of choices that can satisfy their needs. Females, moreover, prefer to buy multiple things that fit together, such as a gown, a purse, and heels, which explains their attraction in product diversity. As a result, customers wish to find all of these items in one online store. Furthermore, the quality of the product are a concern for Saudi female consumers when they shop online, where they cannot verify or check their products. Alotaibi (2021) noted that online consumers rely significantly on virtual, rather than face-to-face, interactions. Therefore, consumer reviews on particular products determine whether purchases will be high. It is a highly subjective factor because consumers use online reviews to make pre-judgments on the product quality, depending on what other online consumers say about the product.

Pantano et al. (2020) identified the challenges retailers faced, to supply stores with a variety of goods during the pandemic. For example, Italian businesses and pharmacies were running out of hand sanitizer and medical masks, while businesses in UK were running out of toilet paper. According to bint AbdulAziz Al-Khanini (2021), the COVID-19 virus has had a considerable impact on the degree and component of client purchasing behaviors across Saudi Arabia, where household spending varies according to product category, notably a growth in food, hygiene, and home healthcare products. Furthermore, customer purchasing habits differ greatly based on region. The Saudi Arabian consumers, during the pandemic, targeted necessities that included food and nutritious products, such as noodles and cooking oil. Saudi consumers' necessities had shifted, due to the layoffs and salary reductions, especially in the private sector that marked the customer's spending abilities (Illankoon 2020). Saudi customers preferred to buy food in a real store,

before the pandemic. Online shopping during the pandemic helped to increase the sales of different kind of products. Consumers in Saudi Arabia, who originally bought apparel, cosmetics, and devices from online shopping are now also using it to buy food and home necessities (Alkhunaizan and Ali 2022). The Saudi Arabian marketplace sells different kind of products, including household goods, electronics, jewelry, beauty, food items, health, fashion, design products, et cetera.

Amid the pandemic, there was a dramatic increase in online shopping in Saudi Arabia, based on a survey conducted in April 2020. It indicates that grocery, foods, and beverages were the highest purchased products, followed by pharmaceuticals, apparel, shoes, accessories, and lastly, sports and fitness equipment (Statista 2020). Hence, the product variety factor is a vital element influencing Saudi Arabian online consumption.

Hypothesis 1 (H1). *Product variety factor has a significant positive influence on purchasers' online shopping behaviors in Saudi Arabia.*

3.2. Convenience Factor

The term "convenience", in the context of online buying, means the ability to save time, to be able to purchase from anywhere, and compare prices easily (Al-Debei et al. 2015; Hung et al. 2014; Raman 2019) Convenience is the key to online shopping success, and it is the reason for the recent and current market explosion in e-shopping. Online shopping allows customers to purchase stuff, when and where they want, using the payment method they prefer, and having the products and services delivered to their location (Raman 2019). Online shopping is convenient and saves time. According to Kebah et al. (2019), time-saving is crucial in all business operations, as clients prefer convenient alternatives to other time-consuming practices, where they can complete the purchases quickly and in the most comfortable method, by using internet platforms. The convenient concept includes time saving, accessibility, availability, simplicity, affordably reduced purchasing anxiety, and enjoyable shopping (Al Karim 2013). Online shopping, during COVID-19, increased in Saudi Arabia, where clients were able to access a variety of items from the comfort of their own homes, saving time for customers, and generating revenue for the firms. It also helped to reduce contact between people during the pandemic, unlike the traditional methods of purchasing goods and services, that involve visiting the physical shops and marketplaces to choose from various goods that might be time-consuming (Salem and Nor 2020; Alkhunaizan and Ali 2022). Baabdullah and Ansari (2020) found that convenience is an important element that affects Saudi online purchasers. Saudi customers prefer online stores to shop online, due to the time saving, the convenience, the 24-h availability, and better offers, rather than offline shopping.

Hypothesis 2 (H2). *Convenience factor has a significant positive influence on purchasers' online shopping behaviors in Saudi Arabia.*

3.3. Payment Method Factor

Payment refers to transferring money or services and goods from one party in exchange for products or services offered by another party (Boel 2019). Payment methods refer to a variety of online payment tools that make it possible to acquire items or provide services that may be paid immediately and in a short amount of time, such as cash, card, or mobile phone (Cahuana and Rojas 2020). Electronic payment (e-payment) is described as the systematic procedure of transferring the financial value between participants in trade and communicating this value across the information machinery structures, include mobile payments (Andrea et al. 2022). Mobile payment is a method of paying for products via technology, such as smartphones, iPad, and laptop computers. The available payment choices have a significant influence on online shopping preferences. The fact that payment gateways, such as PayPal, allow for secure online transactions on a 24-h basis plays a critical role in determining how willing customers are to engage in online consumption.

Furthermore, internet payments have shown to be efficient in saving buyers' time. The digital transactions have opened doors for Saudi customers, by providing a broader market access. However, increasing concerns of cyber threats and fraud in the payment systems utilized by e-retailers, play a significant role in determining the level of trust that customers have when making debit/credit card payments (Alhamzi 2018). There is a tendency for change in consumer behaviors among SA citizens, where they are initially hesitant towards the use of online payments, as cash-on-delivery option is the favorable way of payment. Saudi customers prefer traditional shopping that entails going to markets and physical stores. The common online payment method in Saudi Arabia mostly entails cash, credit cards, and digital payments (Al-mani 2020; Alotaibi and Faleel 2021).

However, with the COVID-19 restrictions and social distancing protocols, consumers were worried about their wellbeing and preferred contactless financial transactions during the outbreak, which forced individuals to change their payment habits to cashless payment methods and other online transactions. The Kingdom Vision 2030, which was published in 2017, set the way for digitalization. COVID-19 made it possible to promote and explore this change. Consequently, Saudis showed an increase in the use of mobile payment services during the pandemic (Alswaigh and Aloud 2021). The Saudi government Communication and Information Technology Commission (CITC) created an information technology structure to satisfy the rapid growth in the Kingdom (Aljaber 2018). Prior to the epidemic, the CITC made an extraordinary effort by releasing a guide to alert customers about the reliable mobile applications that are licensed with the government, thereby providing an effective awareness among Saudi consumers (Hassounah et al. 2020). However, Saudi citizens are still concerned with fraud and cybercrime issues related to security and trust about their sensitive private information, such as addresses and banking information. For that, business premises must offer customers the most preferred and trusted payment methods, since an entity's checkout proves to be the most important part of the purchasing channels (Elnaim 2019; Hoq 2020).

Hypothesis 3 (H3). *Payment method factor has a significant positive influence on purchasers' online shopping behaviors in Saudi Arabia.*

3.4. Trust Factor

Trust is an important concept in online shopping. Trust is customers' judgments of the site, in terms of their beliefs in the community platform's competence and dependability to protect people' rights, particularly their confidentiality (Martin 2019; Grosso et al. 2020). In online shopping, trust means trusting the quality aspects of the system's electronic services. This includes the website design, privacy, security, efficiency, and customer service/communications (Al-Khayyal et al. 2020). Trust assures consumers that they are accessing legitimate websites, where buyers must share sensitive information, such as credit card details that may lead to fraud, should data be disclosed (Saleem et al. 2019). Hackers and cybercriminals use highly sophisticated technologies to obtain consumers' personal information, posing threats in the modern digital world (Chigada and Madzinga 2021). Cybercrime is defined as any fraud performed through the use of the World Wide Web, such as obtaining an individual's private or financial details (Deora and Chudasama 2021). Cyber-security refers to the procedures, systems, and people's behaviors that aid in the protection of digital databases and the privacy of users (Alhayani et al. 2021).

Research by Salem and Nor (2020) shows that online consumers, worldwide, including Saudi Arabia, are concerned with the safety of personal data shared with e-retailers. Furthermore, it highlights the government's policy to provide consumers with an understanding on how their data is shared with third-party stakeholders and how it is processed. Firms may use social networking methods, such as blogs, to encourage the customer's involvement in sharing information and views about new goods. This can boost the consumers' trust in online shopping and reduce the need to visit physical establishments, especially during a crisis.

The Saudi government has made important efforts to counter the concerns of information security, by establishing the National Cybersecurity Authority (NCA), which was founded in 2017 with the objective of improving governmental cybersecurity and protecting systems and networks. The NCA is responsible for analyzing, formulating, legislating, and controlling the security safeguards of the Kingdom (Quadri and Khan 2019). According to Alzahrani (2020), the Saudi internet system is considered to be reliable and safe, where a lower number of Saudi people are attacked by cybercrime, compared to business corporations. The retailers, according to the Saudi Arabian regulation, must have a business registration issued by the Saudi Ministry of Commerce and Investment, or a Maroof license, which is given to operators of electronic businesses (Almehaimeed 2020). According to Baabdullah and Ansari (2020), Saudi customers' trust with the security mechanisms employed by online stores to secure their payment information and private data, has a significant influence on their online buying decisions. Therefore, electronic business operators should provide consumers with their operator's name and registration details.

Hypothesis 4 (H4). *Trust factor has a significant negative influence on purchasers' online shopping behaviors in Saudi Arabia.*

3.5. Psychological Factors

Psychological factors refer to the motivating perceptions, trust, and attitudes that influence consumers' preferences and spending habits (Dhaliwal et al. 2020). Psychology refers to the human mind and its functions, particularly those that affect the individuals' behaviors, and it encompasses everything from interaction, memorization, and decision-making, to observations, thoughts, and attitudes (British Psychological Society 2022). Motivating can be classified into external and internal incentives that are used to persuade people to become involved in particular behaviors. Internal incentives are based on individual desires and requirements, and external incentive, when making choices, are based on external reasons, such as brand popularity (Salem and Nor 2020). Purchaser perception is described as how the purchaser's understands, thinks, and views an organization, goods, and brand, as well as how they evaluate what they have observed (Zeithaml et al. 2017; Kristi and Kusumawati 2020). Attitudes can be referred to as a person's positive or negative judgment for a given trademark or item in the business market (Kotler and Armstrong 2016; Trivedi and Sama 2020). Notably, clients tend to develop a positive attitude towards a product when they feel satisfied or when it meets their desires and demands. Since the pandemic and the measurement applied by the Saudi government to ease the health crisis, helped in pushing customers to develop a positive attitude towards alternative ways of purchasing. Moreover, consumers tend to influence each other into accepting online purchasing technology (Alkhunaizan and Ali 2022).

Harahap et al. (2021) studied how the pandemic affected consumers' online shopping habits, where the key problem of online shopping was the customer's purchasing behavior. The psychological and environmental factors, legislation, and confidence have an uncontrolled impact on the purchasing behavior that could drive to panic procuring. Personality elements have a large part in managing purchasing behaviors, and applying a good strategy will minimize the probability of reckless expenditures. Amid COVID 19, Al-Ghraibah (2020) investigated customer retention in Saudi Arabia, and discovered that online trust is crucial for customers, and retailers must have a trusting relationship with them. Consumer behavior is significantly affected by the perceived trust and convenience. Di Crosta et al. (2021) investigated the psychological components of the buying behavior during pandemics in Italy, and their results showed that pandemics affect the purchasing behavior, leading to a greater expenditure because of a psychological drive to buy both important and unimportant goods. Ahmed et al. (2020) examined the impact of COVID-19 on US consumer impulse purchases. The results showed that panic buying and the fear of a total closure are the main factors influencing consumer behaviors in the US. Other factors, such as retail shortages and supply chain disruptions, also have a significant impact

on the impulsive purchasing behavior of US residents. Hesham et al. (2021) found that the number of people visiting physical stores has decreased in Saudi Arabia and there is a link between the COVID-19 concern and digital purchasing decisions mediating by demographic characteristics. The research found that Saudi customers have boosted their desire to purchase healthier foods, where females are more concerned about the infection than males and virus phobia is more frequent among the older generation.

Hypothesis 5 (H5). *Psychological factors have a significant positive influence on purchasers' online shopping behaviors in Saudi Arabia.*

Drawn on the above discussed literature review and hypotheses, the research proposal model was established to investigate the factors affecting the online shopping behaviors of Saudi Arabian shoppers (see Figure 1).

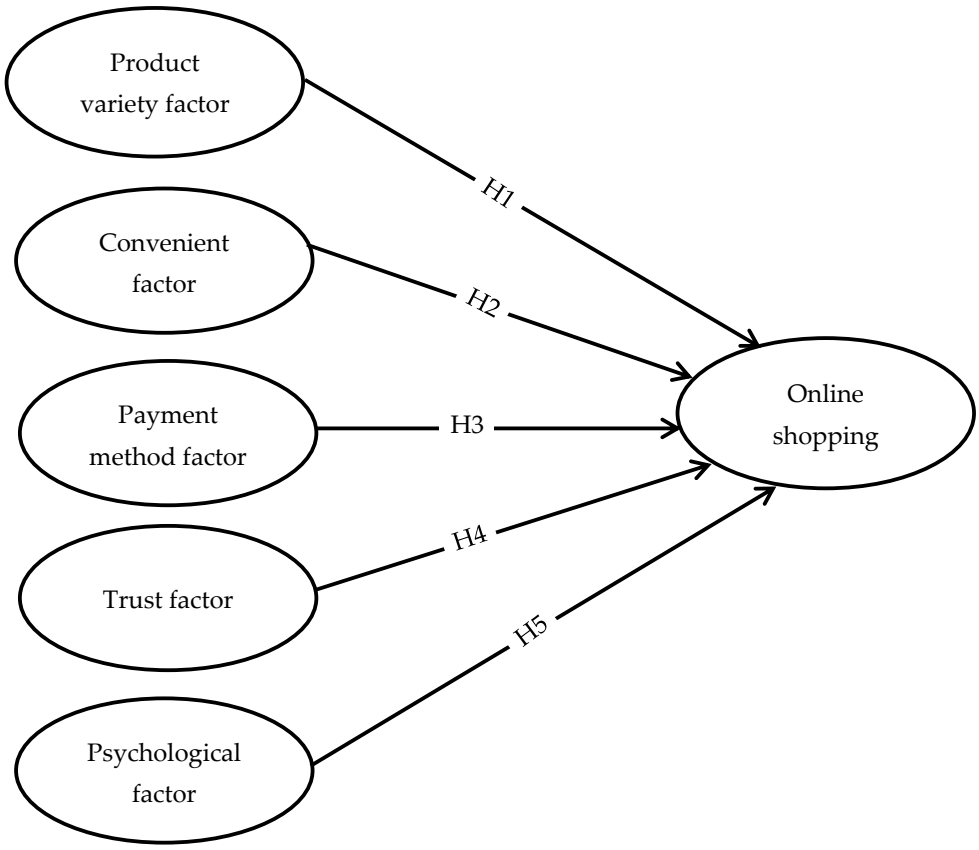

Figure 1. The theoretical research model.

4. Methods

4.1. Data Collection Methods and Procedures

The major goal of the study is to identify the factors that influence customers' purchasing decisions on online shopping during the COVID-19 pandemic. The study's specific objectives are to learn about the consumer purchasing patterns in online shopping amid COVID-19, which will enable businesses to create a wider view to aid in the development of suitable online sales plans that can improve their e-commerce practices and maintain a competitive online business. The study implemented a quantitative approach for the data collection and analysis (Saunders et al. 2009). The primary data collection was a pre-tested instrument with Likert scale items of five points. The questionnaire was designed using Google Docs. The questionnaire was emailed to participants via e-mail, social media "e.g., WhatsApp, Twitter, and Facebook". Prior to the collection of the questionnaires, a consent of participation was obtained from all respondents (Rashid et al. 2019). The

objectives of the study were explained before consent was obtained from the participants. In addition, the study considered the anonymity of the respondent and they were informed that the data collected was for study purposes. The data were collected in February 2021, when the pandemic was at its peak.

The questionnaire was developed, based on the conceptual framework (Figure 1). The questionnaire contained two sections. The first section of the questionnaire focused on the demographic features of the purchasers' profile, including consumer online purchasing frequency. The second section of the study examined the factors affecting the purchasers' online shopping behaviors during the COVID-19 pandemic in Saudi Arabia. The research items in section two were adopted from Le Tan et al. (2021). The questionnaire was developed in the form of a five point Likert scale (1 = strongly disagree to 5 = strongly agree). Using Google Docs, the respondents were asked to state their level of agreement with each item. This was a part of the overall research process, which is presented in Figure 2.

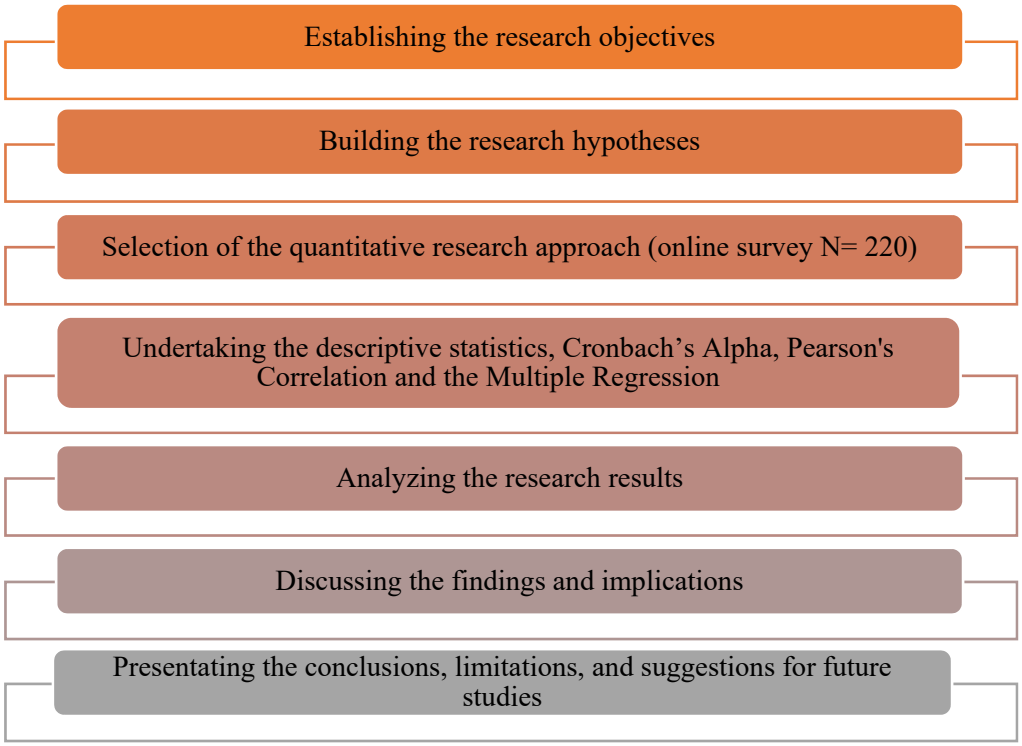

Figure 2. The research process.

4.2. Sampling

The target populations consisted of online shoppers in the eastern province of Dammam and Al Ahsa, in Saudi Arabia. The sample size for the study consisted of 220 questionnaires. Applying Cochran's formula (Cochran 1977), a sample of 200 participants or more is viewed as an acceptable number of respondents (Kline 2015). This research adopted the non-probability "convenience" sampling technique, due to the accessibility of the participants and the time constraints amid the pandemic (Cooper and Schindler 2014). The research sample consisted of 256 respondents, where 36 of them were disregarded because they were incomplete. Accordingly, only 220 questionnaires were officially utilized in the study.

4.3. Data Analysis

The collected data was immediately saved as a Google survey and was exported to the SPSS (Statistical Package for the Social Sciences) software for further analysis. The research employed descriptive statistics, which includes the frequency percentage method to analyze the demographic information, including the frequency of the use of online

platforms by Saudi Arabian consumers. These demographic features were analyzed in the context of the change in the economic situation in the country, caused by the COVID-19 pandemic, including gender, age, education level, monthly income, and occupation. To test the hypothesis, the research was carried out with the following methodological steps. First, the research employed descriptive statistics, which included maximum, minimum, mean, standard deviation, skewness, and kurtosis, as measures of variability. This kind of analysis is considered accurate for identifying relations and acquiring data. However, one of the main issues with this method is whether the research participants constitute a representative sample of the public. Then, to ensure the reliability of the scale, the research employed Cronbach's Alpha coefficient. Finally, the research used Pearson's correlation and a multiple linear regression analysis to check the suitability of the research model. This allowed the researchers to quantify the impact of each independent variable (the five major factors) on the dependent variables (online shopping amid the pandemic).

5. The Results

5.1. Characteristics of the Respondents

According to the data presented in Table 1, the majority of the respondents were females (74.1%) and the minority were males (25.9%). In this research, the highest proportion of participants (42.3%) were aged above 45 years, followed by those in the age range between 36–45 years (27.7%), then 26–35 years (20.9%), and 18–25 (9.1%). Moreover, the research categorized the education levels into five categories. These are Bachelor's degree (60.9%), high school (15.9%), postgraduate (15.5%), and diploma (5.0%), below high school (2.7%). Therefore, the majority of the participants have completed the Bachelor degree level. The research categorized the respondents' monthly income into six levels, as 23.6% have an income level above SAR 15,000, 22.3% of respondents have an income in the range between SAR 10,001 and SAR 15,000, 16.4% have a monthly income of less than SAR 4000, 14.5% have an income between SAR 8001 and SAR 10,000, 13.2% make between SAR 4000 and SAR 6000, and 10.0% make between SAR 6001 and SAR 8000, respectively. It indicates that the majority of respondents have an appropriate income level. In this survey, most of the participants are government employees with 46.8%, 20% are unemployed, the private sector accounts for 17.3%, students account for 8.2%, and the self-employed account for 7.7% only. For this reason, most of the online shoppers who completed the questionnaire are government employees.

Table 1. Demographic information of the respondents.

	Distribution	Frequency	Percentage
Gender	Female	163	74.1
	Male	57	25.9
Age	Between 18–25	20	9.1
	Between 26–35	46	20.9
	Between 36–45	61	27.7
	Above 45	93	42.3
Educational level	Below high school	6	2.7
	High school	35	15.9
	Diploma	11	5.0
	Bachelor's degree	134	60.9
	Postgraduate	34	15.5
Monthly Income	Less than SAR 4000	36	16.4
	Between SAR4000 and SAR 6000	29	13.2
	Between SAR 6001 and SAR 8000	22	10.0
	Between SAR 8001 SAR 10,000	32	14.5
	Between SAR 10,001 and SAR 15,000	49	22.3
	Above SAR 15,000	52	23.6
Occupation	Student	18	8.2
	Government employee	103	46.8
	Private sector	38	17.3
	Self-employed	17	7.7
	Unemployed	44	20.0

Table 2 shows responses in relation to the respondents' attitudes towards online shopping in Saudi Arabia amid the COVID-19 pandemic. The majority of participants (55.0%) adopted e-shopping once or twice per month, followed by frequent users for with more than five times per month (20.9%), 13.2% of participants never used e-commerce by themselves, and only 10.9% used e-commerce regularly, between three and five times per month, respectively. According to the results, most of the respondents were occasional e-commerce users during the pandemic. As for the amount of money spent monthly on online shopping before COVID-19, the result showed that 47.7% of respondents spent more than SAR 700, followed by 20.0% who spent between SAR 300 and 499, 17.7% spent between SAR 500 and 700, and only 14.5% spent less than SAR 300. Moreover, the amount of money spent on online shopping after COVID-19, showed that 64.1% spend more than SAR 700, 17.7% spend between SAR 500 and 700, 11.8% spend between SAR 300 and 499, and 6.4% spend less than SAR 300. It indicates that participants are spending more after the pandemic than before the pandemic. Regarding the most important issue for the respondents, during online shopping amid the COVID-19 pandemic, the majority of respondents (39.5%) selected product quality, 24.5% selected price, 22.3% selected promotions, 9.1% selected other criteria (such as trust), and only 4.5% selected delivery time. It implies that the majority of respondents were drawn to high-quality products during the pandemic in Saudi Arabia.

Table 2. Attitudes towards online shopping by the respondents.

	Categories	Frequency	Percentage
Have you ever used an e-commerce platform since the pandemic started?	Very often (more than 5 times/month)	46	20.9
	Regularly (3–5 times/month)	24	10.9
	Sometimes (1–2 times/month)	121	55.0
	Never been used	29	13.2
How much money did you spend monthly on online shopping before COVID-19?	Less than SAR 300	32	14.5
	SAR 300–SAR 499	44	20.0
	SAR 500–SAR 700	39	17.7
	More than SAR 700	105	47.7
How much money did you spend monthly on online shopping, amid COVID-19	Less than SAR 300	14	6.4
	SAR 300–SAR 499	26	11.8
	SAR 500–SAR 700	39	17.7
	More than SAR 700	141	64.1
What is the most important issue for you when shopping online?	Price	54	24.5
	Delivery time	10	4.5
	Promotions	49	22.3
	Product quality	87	39.5
	Other	20	9.1

5.2. The Results of the Descriptive Statistics

This part presents the various elements affecting online purchasing behaviors. All factors are tested on a 5-point scale, ranging from strongly agree to strongly disagree (Table 3). The results indicate that the convenient factor (CF) had a minimum response value of 2.67, and a maximum response value of 5.00. The highest average was awarded to the CF3 item: (during the lockdown due to COVID-19, it is still possible to order online), with a means of 4.24 and a standard deviation of 0.66. The weighted average of the CF was 4.12 and the standard deviation was 0.61, which indicates that the trend of the CF is in agreement with the general trend, according to the 5-point Likert scale, since its lies in the interval (3.40–4.19), which is considered to be a high level. With regard to the psychological factor (PF), the results indicated that they had a minimum response value of 1.00, and a maximum response value of 5.00. The highest average was awarded to the PF1 item: (I feel comfortable when surfing on e- commerce platforms), with a means of 3.90 and a standard deviation of 0.84, followed by the PF3 item: (I buy because I feel convinced by the marketing of that e-commerce platform) with a means of 3.52 and a standard deviation of 0.87. The weighted average of the PF was 3.60 and the standard deviation was 0.70,

which indicates that the trend of the PF is in agreement with the general trend, according to the 5-point Likert scale, since its lies in the interval (3.40–4.19), which considered to be a high level.

Table 3. Descriptive statistics.

Items	Min	Max	M	SD	Sk.	Ku.
Convenient factor (CF) (α = 0.78)	2.67	5.00	4.12	0.61	−0.17	−0.72
CF1: "I can shop online on e-commerce platforms, anytime, anywhere"	1.00	5.00	4.10	0.85	−0.81	0.39
CF2: "I find online shopping on e-commerce platforms more time-saving"	1.00	5.00	4.03	0.79	−0.50	0.12
CF3: "During the lockdown, due to COVID-19, it is still possible to order online"	2.00	5.00	4.24	0.66	−0.68	0.98
Psychological factor (PF) (α = 0.71)	1.00	5.00	3.60	0.70	−0.24	1.02
PF1: "I feel comfortable when surfing on e- commerce platforms"	1.00	5.00	3.90	0.84	−0.49	0.21
PF2: "I prefer online shopping on e- commerce platforms because I like the virtual interaction"	1.00	5.00	3.39	0.94	−0.41	0.15
PF3: "I buy because I feel convinced by the marketing of that e-commerce platform"	1.00	5.00	3.52	0.87	−0.43	0.38
Trust factor (TF) (α = 0.72)	1.50	5.00	3.53	0.62	−0.26	0.89
TF1: "This website is full of features to protect customers' personal information"	1.00	5.00	3.25	0.94	−0.38	−0.08
TF2: "Products are delivered on time, as promised, by the e-commerce platform"	1.00	5.00	3.51	0.82	−0.64	0.23
TF3: "The product is carefully packed and intact when the buyer receives it"	1.00	5.00	3.89	0.67	−0.68	1.67
TF4: "If problems arise, I can expect to be treated fairly by this online shop on the e-commerce platform"	1.00	5.00	3.48	0.88	−0.65	0.58
Payment Method factor (PMF) (α = 0.74)	2.00	5.00	4.06	0.58	−0.30	0.74
PMF1: "The payment methods on the e-commerce platform are diverse"	1.00	5.00	4.09	0.67	−1.02	2.11
PMF2: "I can pay simply and fast using a variety of methods"	2.00	5.00	4.15	0.63	−0.35	0.34
PMF3: "Electronic payments on e-commerce platforms have more promotions than direct payments"	1.00	5.00	3.94	0.81	−0.75	1.19
Product Variety factor (PVF) (α = 0.82)	2.33	5.00	4.04	0.65	−0.21	−0.16
PVF1: "Most of the products I want to buy are readily available"	1.00	5.00	3.95	0.81	−0.57	0.29
PVF2: "I can find many products from different brands"	1.00	5.00	4.03	0.79	−1.12	2.39
PVF3: "Products on e-commerce platforms are diverse in price, from cheap to expensive"	2.00	5.00	4.14	0.65	−0.34	0.14
Online shopping (OS) (α = 0.74)	1.00	5.00	4.10	0.65	−0.73	1.58
ES1: "Shopping online is essential for everyone during COVID-19"	1.00	5.00	4.25	0.77	−1.32	2.18
ES2: "Shopping online makes buyers more active"	1.00	5.00	3.68	0.96	−0.45	−0.15
ES3: "I think shopping online will become popular in the future"	1.00	5.00	4.37	0.80	−1.51	2.08

Note: min = minimum, max = maximum, m = mean, SD = standard deviation, sk = skewness, Ku = kurtosis.

Regarding the trust factor (TF), the results indicated that it had a minimum response value of 1.00, and a maximum response value of 5.00. The highest average was awarded to the TF3 item: (the product is carefully packed and intact when the buyer receives it) with a means of 3.89 and a standard deviation of 0.67, followed by the TF2 item: (products are delivered on time, as promised by the e-commerce platform) with a means of 3.51 and a standard deviation of 0.82. The trust factor had weighted average mean value of 3.53, and a standard deviation of 0.62, which indicates that the trend of the TF is in agreement with the general trend, according to the 5-point Likert scale, since its lies in the interval (3.40–4.19), which is considered to be a high level. Regarding the payment method factor (PMF), the results indicated a minimum response value of 2.00, and a maximum response value of 5.00. The highest average was awarded to the PMF2 item: (I can pay simply and fast using a variety of methods) with a means of 4.15 and a standard deviation of 0.63. The payment method factor had a weighted mean value of 4.06, and a standard deviation of 0.58, which indicates that the trend of the PMF is in agreement with the general trend, according to

the 5-point Likert scale, since its lies in the interval (3.40–4.19), which is considered to be a high level. The descriptive statistics for the product variety factor (PVF) had a minimum response value of 2.33, and a maximum response value of 5.00. The highest average was awarded to the PVF3 item: (products on e-commerce platforms are diverse in price, from cheap to expensive) with a means of 4.14 and a standard deviation of 0.65. The product variety factor had a weighted mean value of 4.04, and a standard deviation of 0.65, which indicates that the trend of the PVF is in agreement with the general trend, according to the 5-point Likert scale, since its lies in the interval (3.40–4.19), which is considered to be a high level. The reliability of the instrument was ensured through Cronbach's Alpha and all of the variables were above 0.7 (Nunnally 1967).

The results indicated that online shopping (OS) had a minimum response value of 1.00, and a maximum response value of 5.00. The highest average was awarded to the ES3 item: (I think shopping on e-commerce platforms will become popular in the future) with a mean of 4.37 and a standard deviation of 0.80, followed by the ES1 item: (shopping on online platforms is essential for everyone during COVID-19) with a mean of 4.25 and a standard deviation of 0.77. The online shopping had a weighted average mean value of 4.10, and a standard deviation of 0.65, which indicates that the trend of the OS is in agreement with the general trend, according to the 5-point Likert scale, since its lies in the interval (3.40–4.19), which is considered to be a high level (Table 3). The values of the skewness were between (+1, −1), which indicate the symmetry of the data around the axis curve, as shown in the Table 3. All of the values of the kurtosis were between (+3, −3), which means that all of the data fall under the moderating curve, and this confirms the homogeneity of the research group in the results of the questionnaire as a whole and in each of its dimensions.

5.3. Factors Affecting Online Shopping among Saudis Amid COVID-19

The Pearson correlation coefficient (r) is a way of measuring a linear correlation. A correlation is an effect size and so we can verbally describe the strength of the correlation using the guide that Evans (1996) suggests for the absolute value of r: (0.00–0.19 very weak; 0.20–0.39 weak; 0.40–0.59 moderate; 0.60–0.79 strong; 0.80–1.0 very strong). A Pearson correlation coefficient was computed to assess the linear relationship between the convenient factor, psychology factor, trust factor, payment method factor, product variety factor, and E-commerce shopping. Table 4 clearly shows that there is a moderate positive statistically significant correlation at the level of significance (0.01) between the dimensions and each other. However, the correlation coefficient was weak between the (TF) and the (OS) (Table 4).

Table 4. Pearson's correlation coefficient (r) (N = 220).

Pearson's Correlation	(CF)	(PF)	(TF)	(PMF)	(PVF)
Convenient factor (CF)					
Psychology factor (PF)	0.452 **				
Trust Factor (TF)	0.249 **	0.489 **			
Payment method factor (PMF)	0.498 **	0.401 **	0.435 **		
Product variety factor (PVF)	0.488 **	0.422 **	0.428 **	0.592 **	
Online shopping (OS)	0.401 **	0.530 **	0.399 **	0.561 **	0.578 **

** Correlation is significant at the level of 0.01 (2-tailed).

The multiple regression is a statistical technique that can be used to analyze the relationship between a single dependent variable and several independent variables. A multiple linear regression was conducted to predict the online shopping (OS), based on the convenient factor (CF), psychological factor (PF), trust factor (TF), payment method factor (PMF), and product variety factor (PVF). It is clear from Table 5 that there is a statistically significant effect at the level of significance (0.01) for the (PF), (PMF), (PVF) as independent variables on total variance of the (ES) as a dependent variable. These findings support H5, H3, and H1, respectively. Nonetheless, there is no statistical significant effect for both the

convenient factor (CF) and the trust factor (TF), as the significance level is greater than (0.05). These findings did not support H2 and H4, respectively.

Table 5. Regression coefficients.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.711	0.275		2.584	0.010
Convenient factor (CF)	−0.015	0.066	−0.014	−0.225	0.822
Psychology factor (PF)	0.274	0.057	0.298	4.802	0.000
Trust factor (TF)	0.014	0.064	0.013	0.222	0.824
Payment method factor (PMF)	0.301	0.074	0.268	4.047	0.000
Product variety factor (PVF)	0.295	0.066	0.295	4.477	0.000

6. Discussion

COVID-19 has affected retail businesses and consumers' behaviors, which is becoming more digital. This study examined the factors that affect Saudi Arabian customers' online purchasing decisions, amid COVID-19.

6.1. The Effect of Product Variety Factor on Purchasers' Online Shopping Behaviors in Saudi Arabia Amid COVID-19

The results showed a moderate positive correlation between the product variety factor and online shopping. The product variety factor has a significant positive influence on purchasers' online shopping behaviors. This can be explained by the fact that product variety increases consumers' likelihood of finding a good match with their preferences. This is consistent with Aldaej (2019), in which the study showed that Saudi female consumers are favorably impacted by the aspect of product diversity. Giving customers a range of options increases their ability to satisfy their wants, which prompted people to start purchasing online. Valaskova et al. (2021) investigated the effect of the COVID-19 pandemic on consumers' purchasing decisions in Slovakia. The findings revealed that shoppers' income, age, and job played critical roles in the context of shifting shopping behavior. According to the survey, online purchases increased by 72%, particularly in product categories, such as electronics, garden supplies, and drugstores.

6.2. The Effect of Convenient Factor on Purchasers' Online Shopping Behaviors in Saudi Arabia Amid COVID-19

Referring to the results, there was a moderate positive correlation between the convenient factor and online shopping. However, the convenient factor had an insignificant impact on e-commerce shopping in Saudi Arabia during the pandemic. Hence, the hypothesis related to this is rejected. This result is in accordance with the research carried out by Azeemi et al. (2019), which examined four factors, including the website design quality, trust, convenience, and promotion, that may affect Saudi customers' online shopping decisions. The results showed that convenience, trust, and promotion had no effect on Saudi customers' online purchasing selections and that only quality had an impact on the consumers' behaviors. In contrast to this study, a research conducted by Gruntkowski and Martinez (2022) examined six factors that influenced online grocery purchasing intentions amid the COVID-19 pandemic in Germany. The results indicated that risk had a negative impact on the purchasing intentions. However, it is estimated to be lower than the pre-COVID-19 scenario. Additionally, other factors, such as usefulness, ease of use, trust, and convenience factors were found to be positively associated with the purchasing intent before and after the pandemic. Naseri (2021) notes that online shopping became the new normal during the COVID-19 pandemic, due to its convenience. This led to an increase in electronic store transactions worldwide, by forcing consumers to purchase online, thereby changing the consumer's online culture. According to Güngördü Belbağ

(2022), customers preferred to shop online as traditional shopping was difficult due to the high risk of illness in shopping areas amid COVID-19. This indicated that the relationship between the purchasing behavior and convenience was not strong. The increase of online shopping in Saudi Arabia has been advanced with the emergence of COVID-19 pandemic in 2020, due to the lockdown restrictions (Jan et al. 2021). As a result, many Saudi shoppers have become accustomed to shopping online, due to the changes in purchasing behaviors in a post pandemic economy. Therefore, the traditional concept of convenience has become normalized by consumers. Additionally, businesses are competing to provide Saudi consumers with a convenient online shopping experience. Online shopping convenience is an important strategic aspect for online marketplaces aimed at providing competitive and satisfactory services (Al-Mushayt et al. 2022). Thus, consumers in Saudi Arabia expect each online platform to provide exceptional convenience.

6.3. The Effect of Payment Method Factor on Purchasers' Online Shopping Behaviors in Saudi Arabia Amid COVID-19

The mode of payment was found to have a moderate positive correlation with online shopping. We therefore fail to reject the research hypothesis (H3) and conclude that the payment method factor has a significant moderate positive influence on affecting purchasers' online shopping behaviors. As the significance level is (0.01), it is less than (0.05), the hypothesis related to it is accepted. This is aligned with another study by Aldaej (2019), which discovered that Saudi female consumers are concerned about the available payment options when they make online purchases. They also highlighted a few preferred payment options, such cash on delivery and MADA payments, that encourage people to shop from Saudi online retailers.

6.4. The Effect of Trust Factor on Purchasers' Online Shopping Behaviors in Saudi Arabia Amid COVID-19

The trust factor was found to be weakly correlated with e-commerce shopping. We found that trust is a statistically insignificant predictor of e-commerce shopping. The insignificant impact is identified through the significance level which is (0.824), is greater than (0.05), therefore the hypothesis related to it is rejected, and conclude that the trust factor does not have a significant negative influence on affecting purchasers' online shopping behaviors. This is in accordance with other research by Azeemi et al. (2019) and Altwairesh and Aloud (2021) that discovered a week co-relation between trust and Saudi online consumer behaviors. In contrast to these results, Suleman and Zuniarti (2019) examined the relationship between usefulness, ease of use, and trust of attitudes, and decisions in purchasing fashion products from online platforms in Jakarta. According to the study's findings, consumer purchasing decisions are not influenced by the perceived ease of use. However, the usefulness and trust aspects have a greatly significant impact on a consumer's decision to purchase online. Since the onset of the pandemic, many Saudis have shifted their shopping experiences online. The increased online shopping perception in Saudi Arabian customers has expanded the operation of international online retail companies, such as Amazon and eBay, after the pandemic (Gull et al. 2022).

The growth of online shoppers in Saudi Arabia prompted the government to introduce regulatory laws and policies that protect the interests of Saudi shoppers. Consumer behaviors have changed because of the new legislation. The e-commerce laws. such as the M/126, have been introduced to ensure that Saudi online shoppers do not fall victim to corrupt businesses, fraud, or other cybercrimes. These laws have instilled trust among consumers seeking to shop online (Aloufi 2020). Due to the regulatory restrictions that regulates the e-commerce industry, most people assume that e-commerce enterprises are reliable. This suggests that many Saudi online consumers do not think that trust influences their decision-making. This finding is consistent with research carried out by Altwairesh and Aloud (2021) who investigated the criteria used by Saudi Arabian companies, to decide whether to accept electronic payments. Those elements include the ease of use, usefulness, cost, compatibility, and trust. The investigation found an impact between usefulness and

compatibility that is related to retailers' intentions to implement digital payment systems in Saudi Arabia. However, there was no a noticeable association between the ease of use, trust, and cost. Consequently, Saudi consumers recognize the reliable network connection and financial infrastructure that can ensure the safety of their merchants and customer data. This clarified that customers' decisions to buy products online are unaffected by trust, since they already have confidence in the dependability of the local online infrastructure.

6.5. The Effect of Psychological Factor on Purchasers' Online Shopping Behaviors in Saudi Arabia Amid COVID-19

The psychological factor had a moderated positive correlation with e-commerce shopping and the significant impact is identified through the significance level, which is (0.01), which is less than (0.05), hence the hypothesis related to it is accepted and we conclude that the psychology factor has a significant effect on purchasers' online shopping behaviors. This is aligned with a different study by Di Crosta et al. (2021); Sobaih and Moustafa (2022), which demonstrated how pandemics have an impact on the psychological purchasing behavior and increase spending due to a psychological need to acquire both important and unnecessary products.

6.6. Implications of the Study

The results showed that three factors, including product variety, payment method, and psychological factors have significant impact on how consumers purchase on e-commerce platforms. Additionally, the results showed that the convenient factor and trust factor, respectively, have a low effect on the customer behavior on e-commerce platforms. Based on this result made during the COVID-19 outbreak, the research offered the following suggestions for methods and ideas that e-commerce businesses may use in the future to draw clients and raise the standard of their services. First, during the pandemic, customers were encouraged to choose online shopping. Therefore, firms should offer customers with more product options, in order to better fulfil their diverse demands, which will keep consumers from migrating to rivals, and stop new competitors from entering the market, especially items that are regarded as necessities. In order to satisfy the demands of a diverse range of clients, businesses must also take into account both product and pricing variety. Next, businesses in Saudi Arabia should provide customers a with variety of payment options on online shops and companies should adjust their card payment and card payback processes to move more swiftly, in order to increase consumer happiness and retention. Finally, e-businesses in Saudi Arabia should update their platform designs to enhance the usability and shopping process. They must ensure timely delivery, security, and privacy of the consumer's information. E-business platforms should also work to enhance their customer service, particularly in terms of how quickly they address customer concerns.

7. Conclusions

During the pandemic, customers gave rise to the online shopping business, when implementing social distancing procedures and staying at home. The investigation was carried out in light of the COVID-19 outbreak that affected online platforms. The study assessed the variables influencing consumer behaviors in Saudi Arabia's eastern region of Al-Ahsa and Dammam. Drawn on the literature review, the study established five main factors, i.e., convenience, psychology, trust, payment method, and product variety, that affect consumers buying behaviors. The results showed three factors, including the product variety factor, payment method factor, and psychology factor, have a significant impact on consumers purchasing on e-commerce platforms, while the other two factors were insignificant. The findings will help e-businesses to build user-friendly platforms to improve the online shopping experience. It will also help e-business platforms to maintain an excellent customer service and product quality standards.

The findings of this study are based on consumer feedback collected through internet surveys over a certain period of time, i.e., during the COVID-19 pandemic. However,

consumer behaviors and priorities may change overtime. Therefore, there is a need to develop regular diagnostics of consumer behaviors, especially towards online shopping. This research investigation was limited to a selection of five online factors. Other variables could not be examined in further research, such as the self-isolation effect during the pandemic. Other variables may also influence consumer behaviors in online shopping, such as price and government support, which may be of interest for future researchers. The current research could be duplicated with a bigger sample size and a wider geographical area, to find out more about Saudi consumers' behaviors in online shopping post-pandemic, in Saudi Arabia. Additionally, other systematic methods, such as face-to-face interviews, may be included for in-depth data collection.

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