

THE IMPACT OF THE COVID-19 ON THE RETAIL INDUSTRY OF IRELAND.

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A DISSERTATION COMPLETED IN PARTIAL FULFILMENT FOR THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN INTERNATIONAL BUSINESS.

SUBMITTED TO NATIONAL COLLEGE OF IRELAND

Abstract

COVID-19 pandemic has had significant impacts on the global economy. The retail industry has been observed as one of the worst-hit sectors, causing unprecedented levels of disruptions to different aspects of the supply chain. Similarly, the pandemic considerably impacted consumer behaviour and caused challenges in shopping activities as observed by studies carried out in different parts of the world. In line with this, this study set out to understand the impacts of the pandemic on the retail sector and consumers in Ireland. The study adopted a combination of a descriptive and inferential research design approach and employed a convenience sampling approach to engaging consumers in the Irish retail industry. The survey findings revealed that the COVID-19 pandemic considerably impacted consumer behaviour in Ireland. Increased transition to digital/online purchasing, increased demand for essential items, increased size and frequency of purchases and change in consumption habits are some of the behavioural changes observed by this study. Also, the study confirmed that the pandemic caused supply chain disruptions, supply shortages, demand fluctuations, and challenges of customer retention, and in turn, influenced increased investment in technology adoption and e-commerce for retailers. Finally, after conducting a Chi-square test of association, and an independent-sample t test, the study found the effect of gender on both consumer behaviour and perception of impacts of the pandemic on the Irish retail sector. The study concluded with valuable theoretical and managerial implications, and also provided valuable insights into future research directions.

Keywords: COVID-19 pandemic; Consumer Behaviour; Consumer perspective; Retail; Retail industry.

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Acknowledgements

Firstly, I would like to thank my supervisor, Anne Cooper, for her constant praiseworthy guidance, excellent support, and feedback, which enabled me to complete this study. I would also like to thank God for his guidance. Writing this dissertation was made possible by my lovely brother who constantly encouraged me through the research process and motivated me on the harder days.

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CHAPTER ONE

INTRODUCTION

1.1 Background to Study

The COVID-19 pandemic is unprecedented in its impacts globally, causing adverse health effects and death. According to World Health Organisation data, there have been over 480 million cases of infections, and more than 6 million deaths worldwide since the emergence of the disease (WHO, 2022). On the other hand, the pandemic shook the global economy, putting a pause in economic activities for several months, as a result of the lockdown measures imposed by several countries to mitigate its spread. For example, at the height of the disease in 2020, the lockdown directive imposed by different countries meant that passenger and cargo traffic halted, which affected the flow of raw materials and also disrupted production (Eger et al., 2021; Harapko, 2021; Mazareanu, 2021; IATA, 2020). Additionally, non-essential businesses were required to close down, while businesses providing essential services operated in difficult conditions (Organisation for Economic Co-operation and Development -OECD, 2020). The negative impact of the pandemic on workers has also been noted (Adams-Prassl et al, 2020; Carranza et al, 2020) with the overall impact on economies worldwide estimated to be a significant loss amounting to several trillion US Dollars (United Nations Department of Economic and Social Affairs - UNDESA, 2020; Barrot et al, 2020; Warwick & Fernando, 2020).

Furthermore, one of the most affected economic sectors is the retail industry. Firstly, the lockdown and social distancing policy primarily affected retail businesses differently. While some retail businesses such as those in the food and healthcare sector remained open, those dealing in items considered non-essential were required to close down. Even those that remained open had to operate in an extremely difficult situation, including restrictions affecting employee availability and general mode of operations (Jung & Jeon, 2021; Bartik et al, 2020 OECD, 2020). Additionally, the pandemic disrupted their logistics and supply chain operations, resulting in stockouts while demand continued to grow (Jung & Jeon, 2021; Mazareanu, 2021; Meyer et al, 2021; OECD, 2020).

The pandemic has also had a significant impact on consumer buying behaviour. Firstly, due to a combination of lockdown and social distancing measures imposed by authorities, and the perceived risk of contracting the disease, the period saw an increased shift from shopping in brick-and-mortar stores to online purchasing (Eger et al, 2021; Showrav et al, 2021) resulting in growth in online sales higher than pre-COVID period (Qua et al, 2021). Additionally, the pandemic resulted in consumers making significant lifestyle changes, including an increase in the purchase of basic necessities —such as food items, tissue paper, and other personal care

products— and increased awareness on a healthier lifestyle (Deloitte, 2022; Di Crosta et al 2021; Verma & Naveen, 2021; Pantano et al, 2020). Other reported changes in consumer behaviour as a result of COVID-19 include a change in frequency and size of purchases (Rossolov et al, 2022; Schmidt et al, 2021; Kohli et al, 2020), a decrease in discretionary spending (Kohli et al, 2020), changes in consumption habits (Janssen et al, 2021), and change in spending level (Yang et al, 2021).

Besides the impact of COVID-19 on general business processes, the pandemic also impacted other aspects of businesses, especially as regards communication and interactions. For example, the social distancing directive affects interactions and communication as businesses adhere to the COVID-19 mitigation measure (Koren & Pető, 2020). Also, with the switch of businesses to digital channels and reduction in physical interactions, communication between retailers and consumers also increased through the various digital channels (LaBerge et al, 2020) while communication at the stores of essential retail outlets which remained open was restricted to increased information on COVID-19 safety guidelines.

Furthermore, COVID-19 brought about an unfavourable customer experience. For one, customers who had no prior experience shopping online had to adjust to the new normal. On the other hand, those who were able to make purchases at their local stores had to wait in long lines due to social distancing measures (Pantano et al, 2020) and a shortage of basic supplies (Janssen et al, 2021). These issues in addition to poor customer service led to poor customer experience and general dissatisfaction among consumers (Di Crosta et al, 2021; Peachy, 2021; Pickup, 2021).

The retail sector in Ireland has been noted for its importance to the Irish economy. It is regarded as the biggest private-sector employer, employing around 280,000 workers. Also, the sector contributes significantly to the GDP, with €30 billion annually, amounting to about 12 per cent of the national GDP and €7 billion in tax revenue (Retail Ireland, 2018). However, prior to the emergence of COVID-19, the sector had been facing several challenges noted to revolve around changing consumer behaviours, customer expectations, and an increased shift to online shopping (Deloitte, 2020; Retail Ireland, 2018). These challenges have been exacerbated by the pandemic with non-essential retail businesses having to close their stores to customers for almost 4 months, and the essential businesses having to operate under scrutiny (Deloitte, 2020).

However, it remains unclear in specific terms and ways in which the sector has been impacted by the pandemic and few studies have been conducted in this area, especially from the perceptive consumers. It is against this background that the proposed research seeks to examine the impact of the COVID-19 pandemic on retail businesses in Ireland from the

perspective of consumers, using a case study of a retail chain store in Dublin. The study identifies the impact of the pandemic on consumer behaviour in Ireland in relation to the retail industry. Also, it examines the impact of the pandemic on the retail industry from the perspective of consumers, especially around issues of general operations, retailer-consumer interactions, and supply chain disruptions. Additionally, it highlights the challenges of shopping during the pandemic and how consumers have adapted to the situation. The findings of the study will thus help retailers better understand the impact of the pandemic on consumers as well as the retail industry in general and help them identify feasible strategies that can be implemented to overcome the adverse effects of the pandemic.

1.2 Statement of Research Problem

As with other parts of the world, the impact of COVID-19 in Europe was equally significant. The region had some of the worst-hit countries by the pandemic. For instance, the UK has had more than 21 million cases with about 166,000 deaths recorded. Similarly, Italy recorded over 14 million cases and about 160,000 deaths, while Spain recorded over 11 million cases and 103,000 deaths. In addition to these gruesome numbers, the economy was equally hit, as GDP fell as much as 6.1% (Verwey & Monks, 2021). In Ireland, there has been over 1.4 million COVID-19 cases and about 6,700 deaths. Similarly, the economic outlook as a result of the pandemic was substantial, with the unemployment rate reportedly rising as much as 27.1 per cent in January 2021 (Carswell, 2022) and household spending decreasing by up to 22 per cent (McQuinn et al, 2020).

The pandemic has also affected businesses —especially retail— in different ways. These include disruptions to supply chain systems causing stockouts and also worsened by demand fluctuations, issues with employee availability, and challenges arising from having to adapt the general mode of operations to the new situation. Also, consumer buying behaviour has been impacted, as a result of challenges experienced in shopping activities during this period.

The retail industry in Ireland is not left out, especially as it had been undergoing several challenges prior to the emergence of COVID-19, due to already changing consumer behaviours and customer expectations (Deloitte, 2020; Retail Ireland, 2018). These challenges have however been exacerbated by the pandemic with non-essential retail businesses having to close their stores to customers for almost 4 months, and the essential businesses having to operate under scrutiny (Deloitte, 2020).

With the significance of the retail industry in Ireland, particularly as a significant employer of labour and its contribution to the national GDP, and the impacts of COVID-19 that have been noted globally, it remains unclear how the retail sector in Ireland is affected. Particularly, it is unclear how consumer behaviour has been affected, as well as the challenges faced by both

the retailers and consumers as a result of the pandemic. The paucity of research in this direction has thus provided a gap that this study set out to bridge in order to identify the specific challenges affecting the retail sector —particularly from the perspectives of the consumers—due to COVID-19 restrictions.

The study will thus form an important addition to the growing body of literature globally on the impacts of COVID-19 on the economy, particularly by providing the Irish experience. Also, the findings will provide retailers, supply chain managers and relevant policymakers in Ireland with the necessary insight to reposition the retail industry for greater sustainability and resilience going forward.

1.3 Research Questions

The research questions for the research study are as follows:

- 1. What is the impact of the COVID-19 pandemic on consumer buying behaviour in Dublin?
- 2. What is the impact of the COVID-19 pandemic on the retail industry in Dublin from the perspective of consumers?
- 3. How has COVID-19 impacted consumer-retailer interactions in Ireland, Dublin?
- 4. What challenges are consumers facing in their shopping activities during the COVID-19 pandemic?
- 5. How are Consumers adapting to the new circumstances resulting from the COVID-19 pandemic?

1.4 Research Objectives

The objectives of the proposed research study are as follows:

- 1. To determine the impact of the COVID-19 pandemic on consumer shopping behaviour in Dublin.
- 2. To explore the impacts of the COVID-19 pandemic on the Irish retail industry from the perception of consumers, using a case study of Dublin.
- 3. To understand how COVID-19 has impacted consumer-retailer interactions in Ireland, Dublin.
- 4. To investigate challenges faced by consumers in their shopping activities in the retail industry during the COVID-19 pandemic in the context of Dublin.
- 5. To determine how consumers are adapting to the new circumstances resulting from the COVID-19 pandemic.

1.5 Research Hypotheses

1.5.1 Impacts of COVID-19 on the Consumer Buying Behaviour

Existing theories have revealed that there are several factors which predict buying behaviour, including social, economic, and cultural factors, as well as different personality traits (Solomon, 2018; Schiffman & Wisenblit, 2015). In line with these theories, this study proposes that age, employment status, and marital status will predict consumer buying behaviour regardless of the impacts of the COVID-19 pandemic. A hypothesis is therefore developed as follows:

H1: There will be a significant relationship between the consumers' socio-demographic factors and their perception of COVID-19 impacts on consumer buying behaviour in Ireland

1.5.2 Impacts of COVID-19 on the Retail Industry

Studies on the impacts of COVID-19 on the retail industry have been numerous, with researchers identifying several impacts. However, to gauge the impacts of the pandemic on the retail industry in Ireland from the perception of consumers, this study has adopted 10 items from the existing studies. Consequently, this study proposes that the consumers will generally agree on these impacts, with no significant variation in their responses. Thus, a hypothesis is developed as follows:

H2: There will be no significant difference in the consumers' perception of COVID-19 impacts on the retail industry in Ireland

1.6 Scope of Study

Due to the vast number of existing studies on COVID-19 impacts, especially on consumer behaviour (Veiga & Diogo, 2022) it is necessary to define the scope of this particular study. Thus, this study focuses on the assessment of the impacts of COVID-19 on the retail industry in Ireland. Specifically, the researcher attempts to understand the impacts of the pandemic on consumer behaviour, retailing, consumer-retailer interactions, and shopping activities from the perspectives of the consumer.

Furthermore, in terms of geography, the study will primarily focus on consumers in Dublin. These consumers will be sought through online platforms, including social media channels like Facebook, Twitter, and WhatsApp. Subsequently, the consumers will be engaged for their perspective through an online data collection platform.

1.7 Structure of the Dissertation and Conclusion

The dissertation is sub-divided into six broad sections. Subsequent to the introduction, which provides a background to the research, the next section focuses on the review of literature relevant to the current study. These studies include those on consumer behaviour in time of

crises, as well as during the pandemic. Also, studies on impacts of COVID-19 on retailing are reviewed, in addition to those which highlight the various challenges of consumer-retailer interaction and shopping during the pandemic. These studies thus provide a strong basis for the current study.

Furthermore, chapter three focuses on a discussion of the adopted research methodology. The components of this discussion includes the review of research design, population and sampling procedure, and data collection instrument. Additionally, the section focuses on the discussion of the data collection procedure —including the aspects of piloting and reliability testing, data analysis techniques, and ethical consideration for the research. Conversely, chapter four focuses on the analysis and presentation of the research findings in line with the objectives of the research.

Chapter five focuses on a discussion of the findings within the context of existing literature, while chapter six concludes the dissertation by highlighting the implications of the findings and the contributions of the research in general. Also under this section, the research limitations are highlighted, and future research direction is recommended.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The COVID-19 pandemic has had unprecedented impacts on retailing activities worldwide. This section thus focuses on highlighting the previous findings by extant literature on the objectives of this research. The section is arranged in line with the research questions by firstly identifying existing observations on how the pandemic has affected consumer behaviour, and then the retail industry in general. Furthermore, existing findings on the impact of the pandemic on the consumer-retailer relationship were examined while this was followed by the findings on the challenges of shopping as experienced by consumers during COVID-19.

The review focused on studies conducted from the emergence of COVID-19 in late 2019 till the present, while studies earlier conducted in previous crisis times were also consulted to provide context to the current findings. Also, the review depended on articles published in journals across several fields: including the Journal of Retailing and Consumer Services, Journal of Risk and Financial Management, Current Research in Behavioural Sciences, and the Journal of Consumer Behaviour.

2.2 Consumer Buying Behaviour

2.2.1 Concept of Consumer Purchasing Behaviour

The field of consumer behaviour is well-researched, with research suggesting that the consumer buying journey is a complex one involving several stages and processes, and also influenced by several factors. The consumer buying journey generally includes three stages known as the input, process, and output stages (Schiffman & Wisenblit, 2015) or more recently as the pre-purchase, purchase, and post-purchase stages (Solomon, 2018). The first stage involves factors which influence the consumer to consider making a purchase; including consumer needs, a firm's marketing efforts, or socio-cultural influences. In a linear process, this stage then leads to the second stage which involves the consumer making conscious efforts to acquire more information which would lead to the of alternatives, and then the eventual purchasing. The final stage describes the post-purchase situation of consumption and consumer evaluation of choice, which could either lead to satisfaction or dissatisfaction.

However, consumer buying behaviour is significantly influenced by internal factors. These include perception, learning and memory, motivation and affect, attitude, and personality traits (Solomon, 2018; 2009). Furthermore, Schiffman and Wisenblit (2015) emphasised on the personality effect to identify several consumer personalities and how they influence buying decisions. The authors identified traits such as innovators, dogmatism, inner-directedness,

and other-directedness, need for uniqueness, sensation seeking, variety and novelty seeking, need for cognition, Optimum Stimulation Level (OSL), verbalizers and visualizers, materialism, fixated consumption, compulsive consumption, and ethnocentrism. These concepts explain how individual consumers are influenced to make the buying decisions that they make and are important predictors of consumer buying decisions.

Conversely, there are also external factors that sometimes trump the internal factors in the consumer decision-making process. These include social, cultural, and economic factors (Solomon, 2018). The desire to identify with a social group and be accepted by members of that group often drive the buying behaviour of many people. Therefore, the influence of social factors depends on social groups and the desire of individual consumers to conform to the group dynamics. In the same way consumers like to identify with social groups, they also make purchasing decisions based on cultural factors. The characteristics and identities shared with a group of people are good predictors of buying decisions, especially along the lines of race and ethnicity, religion, age, and gender. However, the ability of a consumer to make a purchase primarily depends on their economic situation, and this also greatly determines what they are able to purchase regardless of wants and needs. This means that the availability or unavailability of surplus income depends on if consumers make utilitarian or hedonic consumption. Besides consumers' personal economic situation, another function of the type of consumption they make is the general economic situation in the macroeconomy, as well as the indication or their perception of the future economic situation (Solomon, 2018; Carroll, 1994). This situation played out during the financial crisis of 2008, as people in their perception of the present and future economic situation were only buying essential items and foregoing discretionary spending (Mansoor & Jalal, 2011; Bohlen et al., 2009).

Influenced by internal and external factors, consumer decision-making process takes three distinct forms: the cognitive process, habitual process, and the affective process (Solomon, 2018). Some consumer buying decision strictly depends on emotions; how they feel at certain times and how some products make them feel, while other times, consumers make unconscious buying decisions based on habits. However, when required, especially when influenced by external factors such as in times of crisis, consumers make well-thought-out, rational decisions about what they buy. This again speaks to why consumers would invest more on necessities than luxury in times of crisis.

In conclusion, the consumer buying journey is complex, involving a multistage process which begins from identifying a need and ends with the consumption and evaluation of the purchase. Sometimes, this process is influenced by internal factors such as attitude and personality traits, which depends on consumer habits and/or how they feel at certain moments. Other

times, consumer buying decision is influenced by external factors, which can have social, cultural, and/or economic dimension, and mostly requires that consumers be deliberate about their buying decision. All of this has thus showed that situations in the macroeconomy is a great predictor of consumer behaviour, and thus sets the tone for the discussion on consumer buying behaviour during COVID-19.

2.2.2 Consumer Purchasing Behaviour during Crises

In line with the knowledge that the external environment influences consumer buying behaviour, several studies conducted during crisis period have established that consumers adjust their buying behaviour in reaction to the situation surrounding the crisis (Bruun, 2022; Bar-Nahum et al, 2020; Antonetti et al., 2019; Jung et al., 2016; Mansoor & Jalal, 2011; Bohlen et al., 2009; Sneath et al., 2009; Wen et al., 2005). Additionally, changes in consumer behaviour due to these crises usually occur regardless of the nature and scale of the crisis. For example, existing studies conducted on consumer behaviour in times of crisis have focused on different nature and categories of crises; including but not limited to financial, natural disasters, conflicts and wars, and health. Similarly, the occurrence of these crises has ranged from global/regional scale and affecting several millions of people to national-scale crises affecting a few thousand people. This section thus reviews some of the established behavioural change of consumers during global crises like the Great Recession, Severe Acute Respiratory Syndrome (SARS), Hurricane Katrina, the Middle East Respiratory Syndrome (MERS), and the ongoing Russia-Ukraine war.

A significant change in consumer behaviour is in the adjustments made in reaction to crises that pose a threat to their economic situation and also that of the wider economy. In times such as these, consumers will prefer to hold on to their money and only purchase essential items. For example, during the financial crisis from 2007 to 2009, consumers were observed to purchase more of essential items and specifically prefer the low-priced options (Mansoor & Jalal, 2011; Bohlen et al., 2009). Similarly, during the MERS outbreak, consumers in Korea were observed to significantly reduce their spending. However, spending on essential items like groceries did not reduce, while luxuries such as eating out and general outdoor recreation reduced (Jung et al., 2016). Also, in anticipation of the Mexican swine flu becoming a pandemic in 2009, a significant proportion of consumers reportedly expressed their intention to limit expenditures to essential items and avoid spending on entertainment of all forms (Kok et al., 2010). In the wake of the Russian-Ukraine war, consumers in the US are reportedly cutting back on purchasing items such as vehicles, furniture, home appliances, and electronics in favour of essential items like gas, food, and personal care items (Bruun, 2022). The specific causal factors for this change include reduced discretionary income, decreased savings,

economic uncertainty, increased opportunity cost risk (Mansoor & Jalal, 2011), and fear of contracting diseases (Jung et al., 2016).

Another effect of crises on consumer behaviour relates to how they elicit impulsive behaviour which leads to engaging in strange buying behaviour. Sometimes this manifest in simply buying things that are not needed, regardless of the cost, indicative of irrational behaviour. As observed by Sneath et al (2009), influenced by depression as a result of Hurricane Katrina, consumers engaged in strange buying behaviours. Several consumers reportedly just gave in to the urge to make purchases, regardless of whether they are needed or not, while some reported that they even bought things they could not afford. Similarly, during the scare of the Ebola outbreak in Nigeria, more than one-third of consumers interviewed reported buying items in bulk, such as food and hygiene products (Bali et al., 2016). These findings have shown that although emotion is recognised as an internal factor and a predictor of consumer buying behaviour (Solomon, 2018), uncertainties surrounding crisis periods can further trigger this behaviour in consumers.

In another dimension, some crises have the tendency to drive the trend of digital marketing and e-commerce. Some of the crises —most notably health crises—reduce the attractiveness of public places due to the fear of getting infected, which leads people to switch from shopping in-stores to digital platforms. For example, in the case of MERS, (Jung et al., 2016) reported that shopping in brick-and-mortar stores reduced significantly, while on the other hand shopping online increased among the consumers interviewed. Similarly, consumers expressed their intention to shop less in anticipation of the Mexican swine flu (Kok et al., 2010) while Nigerian consumers avoided shopping in stores and open markets in fear of contracting the Ebola virus.

In conclusion, it is clear that besides the internal and external factors that predict consumer buying behaviour, circumstances surrounding different types of crises can also elicit different behaviours from consumers. Specifically, a review of consumer behaviour in financial crisis like the Great Recession; health crisis like SARS, MERS, and Ebola; disasters like the Hurricane Katrina; and wars/conflict such as the ongoing Russia-Ukraine war have revealed changes in the lines of reduced hedonic consumption and increased utilitarian consumption, increased impulsive purchasing, and reduced in-store purchasing as some changes that occur in consumer buying behaviour during crises. This thus provides a backdrop for the research on how the COVID-19 has impacted consumer buying behaviour.

2.2.3 Impact of the COVID-19 pandemic on consumer buying behaviour

It is clear that crises elicit strange buying behaviour in consumers. Therefore, in line with the previous crises highlighted, —but perhaps unprecedented in scale— COVID-19 has been

found to also be influencing consumer buying behaviour, according to several studies. These studies although varied in methods and carried out in different countries all relied heavily on theories of behavioural psychology to explain consumer behaviour during and as a result of the COVID-19. The most notable of these theories is the stimulus-organism-response theory (S-O-R) which explains that consumer behaviour is predicted by different stimuli surrounding the pandemic, which then influenced them to respond in different ways. This suggests that consumers would alter their behaviour as a result of conditions emanating from a crisis, as previously confirmed by Jung et al (2016). For example, in a study conducted for Finnish consumers, Laato et al (2020) found that changes in the buying behaviour of consumers were in reaction to the information about the pandemic which influenced their perception of its severity and then their intention to self-isolate. Similarly, Vázquez-Martínez et al (2021) in a mixed methods research design involving several consumers across numerous countries found that the changes observed in consumers were influenced by their perceptions of the disease rather than actual facts. Also, Eger et al (2021) in a generational cohort study found that changes in consumer behaviour across different generations were primarily influenced by fear, which is also consistent with the findings of Liu et al (2021) in China. Therefore, these studies showed that available information, perception of the crisis and fear were major predictors of the changes in consumer behaviour during COVID-19.

However, regardless of location, studies revealed that all consumers elicited mostly the same buying behaviours during and as a result of the pandemic. One major behavioural change observed across existing studies is the transition of consumers from buying in physical (brickand-mortar) stores to digital stores (Eger et al., 2021; Showrav et al., 2021; Vázquez-Martínez et al., 2021). Mostly, this was because of the lockdown measures imposed by various governments in the hope of containing the spread of the virus, with most businesses having to close down and people having to self-isolate. However, Szymkowiak et al (2020) found another reason for the transition to online shopping. According to them, consumers perceive that there is a possibility of contracting the virus in physical stores if they would contract the virus at all. However, before the lockdown, consumers engaged in buying unusually large quantities of products (Vázquez-Martínez et al., 2021; Laato et al., 2020), a phenomenon referred to as panic-buying (Eva et al, 2021) and found to be predicted by consumers' perception of how long it would take to self-isolate (Laato et al., 2020). Furthermore, as observed in previous crises, consumers reduce their hedonic consumption tendencies and focus only on essential items (Mansoor & Jalal, 2011; Bohlen et al., 2009). Similarly, consumers significantly reduced their purchase of luxury items, and bought more of essential items such as medical supplies, hygiene products, personal and home care products, and food (Di Crosta et al., 2021; Eger et al., 2021; Vázquez-Martínez et al., 2021; Verma &

Naveen, 2021). With regards to food, more consumers were observed to cook and eat more at home, while also preparing their homes to accommodate the changes by procuring refrigerating systems (Bender et al, 2021) all of which contributed to an increase in general spending for consumers (Di Crosta et al., 2021; Yang et al., 2021).

In conclusion, crises and their concomitant circumstances have the tendency to elicit some changes in human behaviour, and this topic area has been well-researched during previous crises. However, as the COVID-19 is unprecedented, it provided an opportunity to further refine existing knowledge on how crises impact consumer behaviour, in order to inform marketing strategies for retailers and bridge the knowledge gap for researchers. Consequently, studies conducted during COVID-19 have revealed some behaviours consistent with previous crisis times. Increased demand for essential items and a decrease in spending on luxury materials, and a consequent change in spending level are classic responses for consumers during times of crisis. Conversely, the pandemic has also revealed consumer behaviours that were not common with previous crises, such as the increased shift from brick-and-mortar stores to digital/online stores, and changes in consumer habits involving more home-cooked meals. Finally, these behaviours were found to be influenced by the circumstances surrounding the disease, such as the available information, which consequently put fear and anxiety in the people and thus informed their behaviours.

2.3 Impacts of COVID-19 on the Retail Industry

COVID-19 is unprecedented in its impacts, which are multidimensional. One of the most affected economic sectors affected is the retail industry, with studies from the academic, retail and supply chain experts identifying these impacts and their implications, both in the short and long term. Perhaps the most significant of these issues is the disruption caused to the supply chain, as this has linkages to other impacts felt by the retail industry. The supply chain disruptions have many forms; affecting transportation, supply of raw materials and manufacturing, labour availability. To begin with, the onset of the virus in China in late 2019 and early 2020 led to the country imposing a lockdown which slowed down manufacturing and meant that many industries in different parts of the world which depend on manufacturing inputs from China experienced delay as the transport network was also shut (Lafrogne-Joussier et al., 2022). Consequently, the manufacturing of finished goods got delayed causing unprecedented levels of backlog which led to increase in product prices and eventual inflation due to the inability to meet demand (Santacreu & LaBelle, 2022). Friesen (2021) in his analysis of the supply chain disruption and its impacts on the U.S. noted that the disruption was caused by a myriad of factors, with linkages. For instance, the author noted that disruptions to transport network and flow caused delays in receiving inputs for manufacturers, which halted

production. However, it also meant that ships and containers that had gone on voyage could not get back to make more deliveries, with the container shortage resulting in the price of containers skyrocketing. Furthermore, shipping costs also rose, while the delay in processing orders meant that warehouses could not be decongested, further worsening the supply chain challenge.

Furthermore, as the supply chain disruption worsened, it began to have a trickle-down effect, as supply shortages and stockouts became prominent (Banker, 2021; Schmidt et al., 2021; Besson, 2020). Studies have attributed the cause of this situation to two different factors, which are demand-side and supply-side disruptions (Hobbs, 2020). The demand-side disruptions occurred as consumers —influenced by the lockdown directive in numerous countries and ironically the fear of supply shortages— engaged in unusual buying behaviour termed as "panic-buying (Eva et al., 2021; Loxton et al., 2021; Schmidt et al., 2021; Yuen et al., 2020). Consumers engaged in stockpiling behaviour, buying unusual amounts of several essential items, such as health and safety products (Besson, 2020; Clemens et al., 2020; Kostev & Lauterbach, 2020), grocery (Banker, 2021), liquid soap and pasta (McKevitt, 2020) and toilet paper (Paul & Chowdury, 2020; Meyersohn, 2020; Wieczner, 2020) which led to several stores experiencing stockouts for these items. On the other hand, critical supply chain components such as transportation and manufacturing meant that production had to slow down and available finished goods could not be distributed to retailers (Lafrogne-Joussier et al., 2022; Friesen, 2021) thereby significantly affecting supply.

Besides the impact of COVID-19 on general business processes, the pandemic also impacted other aspects of businesses, especially as regards communication and interactions. For example, the social distancing directive affects interactions and communication as businesses adhere to the COVID-19 mitigation measure (Koren & Pető, 2020). Also, with the switch of businesses to digital channels and reduction in physical interactions, communication between retailers and consumers also increased through the various digital channels (LaBerge et al, 2020) while communication at the stores of essential retail outlets which remained open was restricted to increased information on COVID-19 safety guidelines.

Furthermore, COVID-19 brought about an unfavourable customer experience. For one, customers who had no prior experience shopping online had to adjust to the new normal. On the other hand, those who were able to make purchases at their local stores had to wait in long lines due to social distancing measures (Pantano et al, 2020) and a shortage of basic supplies (Janssen et al, 2021). These issues in addition to poor customer service led to poor customer experience and general dissatisfaction among consumers (Di Crosta et al, 2021; Peachy, 2021; Pickup, 2021).

In conclusion, several existing studies have highlighted the impacts of COVID-19 on the retail industry and activities. The pandemic disrupted several supply chain activities by hindering the transportation of production inputs and thus putting a stop to manufacturing, which in turn led to supply shortages. Also, the supply-side disruption was also supported by demand-side disruptions as several consumers engaged in unusual buying behaviours by stockpiling essential items, which meant that the demand of other consumers could not be fulfilled. Also, because the circumstances of the pandemic have sped up the transition to shopping on digital platforms, retailers had to increase investments in technology so as to be able to leverage the transition. All of these issues have shown that COVID-19 had significant impacts on retailers and retailing activities. Conversely, this study will present the perceptions of consumers in Ireland on how the pandemic has affected retailers and retailing activities in the country.

2.4 Impacts of COVID-19 on Consumer-Retailer Interactions

Studies on the impacts of COVID-19 on consumer-retailer interactions have been few. However, a few of the existing studies on the impacts of the pandemic have undertones on how consumer-retailer interactions are affected. For example, there was limited physical interactions between the retailer and the consumer as a result of the pandemic. As observed in the studies of Eger et al (2021), Showrav et al (2021) and Vázquez-Martínez et al (2021), consumers had to shift from shopping in traditional brick-and-mortar stores to online shopping. This thus highlights one dimension in which the relationship between the retailer and consumer is reduced.

Furthermore, in response to the circumstances, retailers had to adapt by increasing their investment in digital marketing, thereby leveraging the situation for growth (Qua et al., 2021; Briedis et al., 2020). This thus resulted in increased communication via the digital channels, through email marketing and other similar methods (Qua et al., 2021). Also, in line with COVID-19 guidelines, stores had to adapt their store settings to allow for social distancing, with the implication being a further gap in communication between retailer and consumers as well as among consumers (Shumsky et al., 2021). Consumer-retailer relationship is important to ensuring customer loyalty and ensuring the transition from a one-time customer to a return customer. However, COVID-19 is creating boundaries between consumers and retailers as the established guidelines aimed at mitigating the spread of the virus resulted in limited interactions.

2.5 Impacts of COVID-19 on Consumer Shopping Activities

The emergence of COVID-19 disrupted several human activities, including work, recreation, and shopping. It disrupted supply chains and caused unavailability of products, which led to significant increase in product prices and then inflation (Lafrogne-Joussier et al., 2022). Also,

some consumers in anticipation of a long period of self-isolation had stockpiled on products (Laato et al., 2021; Schmidt et al., 2021; McKevitt, 2020) with the implication being a big challenge as several items became unavailable for other consumers (Besson, 2020; Meyersohn, 2020). According to Besson (2020), the act of some consumers stockpiling on healthcare and safety products resulted in the challenge of availability of these products for the elderly and people with disabilities. Similarly, Meyersohn (2020) reported that toilet papers, toilet towels and several home cleaning products went out of stock at several Walmart stores thereby causing shopping challenges for several consumers.

On the other hand, another challenge consumers faced in their shopping activities had to do with in-store changes made in adherence to COVID-19 guidelines (Eroglu et al., 2022; Shumsky et al., 2021). As the rate of COVID-19 infections began to go higher, governments in each country gave a lockdown directive, which meant that some businesses had to shut down, while only businesses deemed to be essential were allowed to open. However, those that were allowed to open had to follow strict guidelines regarding the population allowed in stores at any time, wearing of face masks at all times, and limited physical interactions. For instance, Eroglu et al (2022) attempted to assess the effect of crowding levels, and in-store adherence to COVID-19 precautions on consumer satisfaction. The authors concluded that these factors had an impact on consumer-retailer rapport as well as consumer satisfaction. Similarly, Szymkowiak et al., found that the perceived risk of being infected in physical stores caused consumers a decreased level of pleasure in shopping activities during the pandemic.

Furthermore, consumers also experienced challenges with shopping online, especially concerning security. COVID-19 restrictions facilitated an increased switch from shopping in physical stores to shopping online. While this was a challenge in itself for some consumers who had to quickly adapt to the realities of online shopping as a significant number of people could not shop online and those who could were afraid of security challenges (Aseri, 2021; Pabian et al., 2020). Pabian et al (2020) categorised online shopping security challenges into three, namely; security challenges in the means of payment, security challenges of personal data, and security of purchased goods. The authors noted that consumers were bothered about the threats involved during payment, such as being charged wrongly for items not purchased or more than the cost of items purchased. Also, the perceived threat extends to worries about discrepancies between the actual product delivered and the description provided on the digital store, as well as worries about loss of their products in transit, receiving damaged goods or taking delivery of the wrong products.

In summary, consumers experienced numerous challenges in their shopping activities during the COVID-19. According to extant literature, these challenges include shortages in product

supply as a result of disruptions to supply chains and stockpiling behaviour by some consumers, thereby leading to the unavailability of numerous items. Also, the difficulty of shopping in physical stores during the pandemic was also highlighted, as COVID-19 prevention guidelines meant that in-store population density had to be controlled at all times, thereby leading to changes to limit population and ensure social distancing. Also, the transition to online shopping had its own challenges as some consumers lacked the experience of shopping online, while some had to worry about the security threats associated with shopping online. All of these has thus highlighted some of the challenges encountered by consumers in their activities according to studies conducted in other locations. It would be interesting to discover if there are linkages with these findings according to the perception of consumers in Ireland.

2.6 Model Specification for Current Study

Based on the review of existing literature as it relates to the impacts of COVID-19 on the retail industry, the model specification this study is presented under this section.

2.6.1 Impact of the COVID-19 pandemic on consumer buying behaviour

The review of existing literature on how consumer buying behaviour is impacted by the pandemic revealed findings that are in line with previous studies conducted in times crisis. These studies generally revealed that the pandemic is associated with behavioural changes, which include an increased transition to e-commerce and reduced patronage of physical +stores, increased demand for essential items and a concomitant decrease in demand for discretionary consumption, change in frequency and size of purchases, change in spending level, and change in general consumption behaviour. These are thus adapted for the research question on the impacts of the pandemic on consumer behaviour in Ireland, and the model is presented in figure 1.

2.6.2 Impact of the COVID-19 the retail industry

Review of extant studies on the impacts of the pandemic on the retail industry have shown that these are numerous. These impacts encompass disruptions to supply chain, supply shortage and constant stockouts, demand fluctuations, disruptions to routine business processes and systems, increased investment in technology/e-commerce and omnichannel alternatives, reduced demand for non-essential items, reduced customer satisfaction, reduced retailer-consumer interactions, and challenges of customer retention. The model specification for this investigating the perception of Irish consumers is thus presented in figure 2.

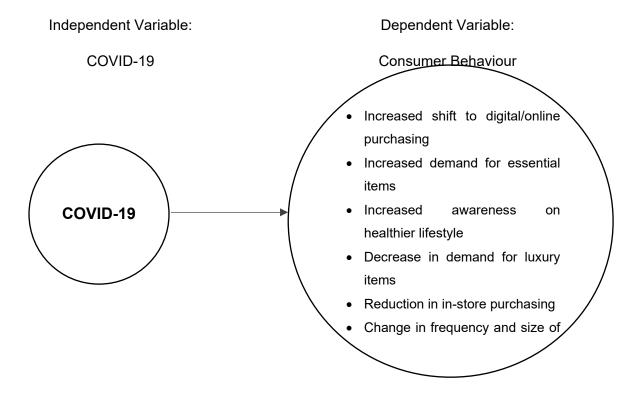


Figure 1: Impacts of COVID-19 on consumer behaviour

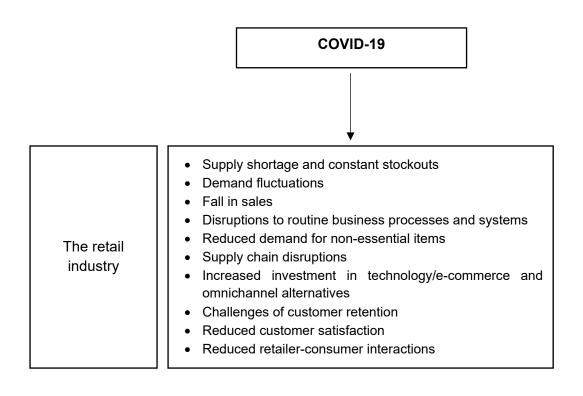


Figure 2: Impacts of COVID-19 on the retail industry

2.6.3 Impact of the COVID-19 pandemic on consumer-retailer interactions

Consumer-retailer interaction during the COVID-19 pandemic is marred by limited physical interactions/communication and a consequent increase in communication through digital channels, increase in frequency of email marketing, increased information on COVID-19 safety guidelines, and reduction in the availability of essential items. The model specification is presented in figure 3.

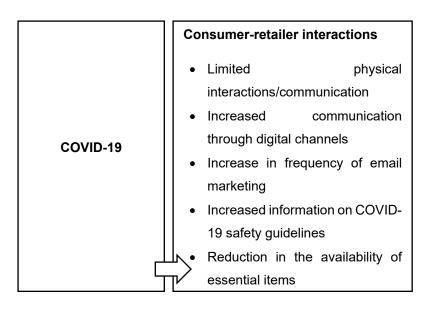


Figure 3: Impacts of COVID-19 on the consumer-retailer interactions

2.6.4 Impact of the COVID-19 pandemic on shopping activities

Relevant existing studies have shown that consumer shopping activities were significantly impacted by COVID-19. These impacts according to the studies include shortage of essential items, unsatisfactory purchasing experience, poor customer service, longer waiting time to purchase at physical stores, changes in the store layout, COVID-19 prevention and safety guidelines, general dissatisfaction level, and minimal interactions with other shoppers and store personnel. The model specification presented in figure 4.

2.6.5 Consumers Adaptive Strategies during COVID-19 Pandemic

In response to the impacts of COVID-19 on shopping activities, studies revealed that consumers developed adaptive strategies such as switching to online and alternative shopping modes, increasing the frequency and size of purchases, reducing discretionary spending, maintaining strict adherence to COVID-19 safety guidelines, and being extremely aware of the security risks associated with shopping online. Therefore, the model specification of the research question on consumer adaptive strategies in Ireland is presented in figure 5.

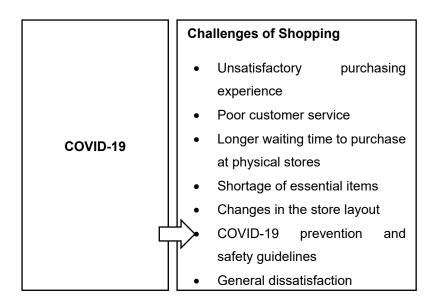


Figure 5: Impacts of COVID-19 on shopping activities

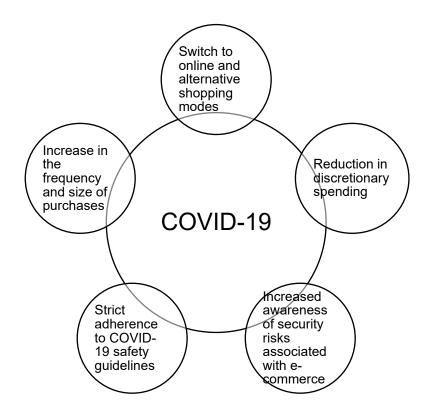


Figure 6: Consumer adaptive strategies during COVID-19

2.7 Summary of Literature Review

The review of existing literature on the impacts of COVID-19 on the retail industry examined findings on studies conducted on the research questions. The review of consumer behaviour as a result of COVID-19 revealed that notable changes in consumer behaviour during the pandemic are not totally different from previous crises, with specific behaviour which includes

an increased demand for essential items and an equally reduction in demand for hedonic consumption, which include consumption for luxury items and other discretionary consumption. Other changes observed include an increased transition to e-commerce and reduced patronage of physical stores, change in general consumption behaviour, change in frequency and size of purchases, and a change in general spending level. Furthermore, the review findings on the impacts of the pandemic on the retail industry in general revealed that these include disruptions to routine business processes and systems, demand fluctuations and general decrease in demand for non-essential items, disruptions to the supply chain, reduced retailer-consumer interactions, which could also be linked to reduced customer satisfaction, and have implications on customer retention.

Moreover, the impacts of COVID-19 on consumer-retailer interaction is observed to have resulted in limited physical interactions/communication and a consequent increase in communication through digital channels, increase in frequency of email marketing, increased information on COVID-19 safety guidelines, and reduction in the availability of essential items, while challenges of shopping activities includes a shortage of essential items, unsatisfactory purchasing experience, poor customer service, longer waiting time to purchase at physical stores, changes in the store layout, COVID-19 prevention and safety guidelines, general dissatisfaction level, and minimal interactions with other shoppers and store personnel.

Finally, consumer adaptive strategies as a result of the challenges relating to COVID-19 are varied but generally include; switching to online and alternative shopping modes, increasing the frequency and size of purchases, reducing discretionary spending, maintaining strict adherence to COVID-19 safety guidelines, and being extremely aware of the security risks associated with shopping online. The section then concluded with model specifications for each research questions, showing the relationship between the independent variable and the dependent variables.

CHAPTER THREE

RESEARCH METHODOLOGY

This section focuses on the discussion of the methodology adopted for the study of the impacts of COVID-19 on the retail industry in Ireland. The section is subdivided into subsections which present different components and stages of the research methodology, such as the research design, research population and sample selection procedure, data collection instrument and data collection method, and data anal ko-ysis.

3.1 Research Objectives

The main objective of the research is to assess the impacts of the COVID-19 pandemic on the retail industry in Ireland. The specific objectives of the research study are as follows:

- 1. To determine the impact of the COVID-19 pandemic on consumer shopping behaviour in Dublin.
- 2. To explore the impacts of the COVID-19 pandemic on the Irish retail industry from the perceptive of consumers, using a case study of Dublin.
- 3. To understand how COVID-19 has impacted consumer-retailer interactions in Ireland, Dublin.
- 4. To investigate challenges faced by consumers in their shopping activities in the retail industry during the COVID-19 pandemic in the context of Dublin.
- 5. To determine how consumers are adapting to the new circumstances resulting from the COVID-19 pandemic.

3.2 Research Questions

The research questions for the research study are as follows:

- 1. What is the impact of the COVID-19 pandemic on consumer buying behaviour in Dublin?
- 2. What is the impact of the COVID-19 pandemic on the retail industry in Dublin from the perceptive of consumers?
- 3. How has COVID-19 impacted consumer-retailer interactions in Ireland, Dublin?
- 4. What challenges are consumers facing in their shopping activities during the COVID-19 pandemic?
- 5. How are Consumers adapting to the new circumstances resulting from the COVID-19 pandemic?

3.3 Research Hypotheses

3.3.1 Impacts of COVID-19 on the Consumer Buying Behaviour

Existing theories have revealed that there are several factors which predict buying behaviour, including social, economic, and cultural factors, as well as different personality traits (Solomon, 2018; Schiffman & Wisenblit, 2015). In line with these theories, this study proposes that age, employment status, and marital status will predict consumer buying behaviour regardless of the impacts of the COVID-19 pandemic. A hypothesis is therefore developed as follows:

H1: There will be a significant relationship between the consumers' socio-demographic factors and their perception of COVID-19 impacts on consumer buying behaviour in Ireland

3.3.2 Impacts of COVID-19 on the Retail Industry

Studies on the impacts of COVID-19 on the retail industry have been numerous, with researchers identifying several impacts. However, to gauge the impacts of the pandemic on the retail industry in Ireland from the perception of consumers, this study has adopted 10 items from the existing studies. Consequently, this study proposes that the consumers will generally agree on these impacts, with no significant variation in their responses. Thus, a hypothesis is developed as follows:

H2: There will be no significant difference in the consumers' perception of COVID-19 impacts on the retail industry in Ireland

3.4 Research Design

This study uses a combination of a descriptive and inferential research design approach. The approach involves the use of qualitative and quantitative methods for the data collection, as well as data analysis and data presentation. This research design approach is selected for the study of the impacts of COVID-19 on the retail industry in Ireland due to its suitability to the research questions. It involved data collection through a structured research instrument administered to a predetermined sample population, in order to generate a better understanding of the research variables. Through this method, the research measures how the pandemic has impacted consumer behaviour, the Irish retail industry, and consumer-retailer interactions. Also, the research design method helped to collect data and examine what challenges consumers faced in their shopping activities as a result of the pandemic, and how they have adapted to these challenges.

Further to the observation and presentation of the research findings using descriptive methods such as frequencies and charts, the research design also enabled the researcher to draw inferences between the variables in order to gain deeper insights into the data. The inferential

analysis, carried out using statistical tools such as the Chi Square and Pearson's r, helped to determine whether there is a relationship between the research variables, which further contributed to the research findings.

Moreover, the research design adopted for this study is also popular among several researchers who have conducted similar studies in other parts of the world. For example, Bender et al. (2021) adopted the research design to examine consumer food purchasing and management behaviour in the U.S. as a result of the COVID-19 pandemic. Similarly, Di Crosta et al. (2021) adopted the same approach for their study carried out in Italy, while Eger et al. (2021) used the method for their study in the Czech Republic. All of these studies yielded important results which contributed to extant literature on the topic of COVID-19 impacts and thus provided an imperative for the adoption of the research design for this study.

3.5 Research Population and Sampling Procedure

The research is focused on the investigation of the impacts of the COVID-19 pandemic on the Irish retail industry from the perspective of consumers. Therefore, the research population are adult consumers (aged 18 years and above) residing and shopping from retail businesses in Dublin. Due to the lack of a sample frame of respondents, the research relied on social media channels such as Facebook

and WhatsApp to select a sample population for the survey.

To select the eventual respondents for the survey, the researcher employed convenience sampling and snowball sampling. The researcher shared social media posts for a month between 30th March and 30th April 2022 requesting that people take part in the survey. The researcher ensured to make the criteria for taking part in the survey known, and also enlisted friends and colleagues to share a similar post on their social media platforms. Besides these efforts, the researcher also requested that people who had shown interest in responding to the survey either share the post or recommend people they know who might fit the sample selection criteria. In the end, a total of 96 responses were received for the survey.

Due to the nature of research as well as constraints brought about by COVID-19, depending on social media as a sample selection channel has recently been common among researchers. For instance, Verma and Naveen (2021) adopted both Facebook and WhatsApp, as well as email to engage respondents in India for their study on the impact of COVID-19 on buying behaviour. Similarly, Neuburger and Egger (2021) adopted the social media for their survey on the impact of COVID-19 on consumer behaviour in the tourism and travel industry. Where there is no sample frame from which to select a sample population, and there are also

other constraints to accessing research samples, the social media has proven to be a viable means of sample selection for researchers.

3.6 Research Instrument and Data Collection

This study adopted a structured questionnaire as the research instrument. The questionnaire was designed by adapting validated scales from previous literature to fit the present research context. It was designed to have five sections constructed to obtain perceptions of the COVID-19 impacts on shopping behaviour, the retail industry, consumer-retailer interactions, challenges of shopping and consumer adaptive strategies. In order to provide their perceptions, the respondents were required to choose from a five-point Likert scale, with all items ranked from 1 (strongly disagree) to 5 (strongly agree). The items provided to elicit perceptions on consumer shopping behaviour include 8 items as suggested by previous studies (Eger et al., 2021; Showrav et al., 2021; Vázquez-Martínez et al., 2021; Jung et al., 2016; Mansoor & Jalal, 2011), while that on impacts on retail industry contained 10 items as suggested by Lafrogne-Joussier et al. (2022), Santacreu and LaBelle (2022), Schmidt et al., (2021), and Besson (2020). Also, the items for consumer-retailer interactions contained 5 items from Shumsky et al. (2021), Qua et al. (2021) Briedis et al. (2020) and 8 items for shopping challenges as provided by Eroglu et al. (2022) and Schmidt et al. (2021), while that on consumer adaptive strategies had 5 items as suggested by the studies of Laato et al. (2021) and McKevitt, (2020) among others.

3.7 Pilot Survey and Data Reliability

Pilot surveys have the capability of improving research quality in both quantitative and qualitative studies, as they assist the researcher in testing the feasibility of the main survey (Malmqvist et al., 2019; Gudmundsdottir & Brock-Utne, 2010). Therefore, prior to data collection for the actual survey, a pilot survey was carried out with the research instrument which has been adopted from various similar studies. The pilot involved 15 respondents carefully selected to represent a diverse group of people, which is what is expected for the actual survey. Subsequent to the data collection, the research instrument was tested for reliability so that it can be amended in time for the main survey.

The reliability of the research instrument to measure the research objectives was calculated using Cronbach's Alpha (α). The test is popular in quantitative and qualitative studies to measure the reliability and validity of the research instrument (Di Crosta et al., 2021; Schmidt et al., 2021;). According to Tavakol and Dennick (2011), the ability of a research instrument to consistently measure what it is designed to measure is what determines its reliability, which also refers to the validity of the instrument. Therefore, the authors concluded that in order to

ensure data validity, researchers should determine the internal consistency of the research instrument using the Alpha.

The test returns a value between 0 and 1, with a result closer to 1 indicating a high level of internal consistency in the instrument, and an acceptable level of Alpha starting from 0.7 (Barbera et al., 2021). Also, the higher the estimate returned by Alpha, the lower the measure of error in the test, while a higher Alpha can also be a result of the length of the research instrument. Therefore, a maximum Alpha of 0.90 is recommended (Tavakol & Dennick, 2011). For this study, the scale to measure the perception of respondents on the impacts of COVID-19 on consumer shopping behaviour had 8 items with a Cronbach's Alpha of .89 (α = .89) which signifies good internal consistency. Similarly, the scale measuring impacts of COVID-19 on the retail industry returned a Cronbach's Alpha of .78 (α = .78), while that measuring impacts on consumer-retailer interactions in Ireland returned a Cronbach's Alpha of .83 (α = .83). Furthermore, with 10 items, the scale measuring the perception of respondents on the challenges of shopping during COVID-19 had returned a Cronbach's Alpha of .97. However, by removing two items as suggested by the Cronbach's Alpha if item deleted parameter, an Alpha of .90 was returned (α = .90). Finally, the scale on consumers' adaptive strategies returned a Cronbach's Alpha of .89 (α = .89). Conclusively, the test statistically guarantees that the research instrument is reliable to generate a valid result for the main study.

3.8 Data Collection

This study adopted the online method of data collection. The questionnaire was a self-administered form designed and hosted through the Google Forms online platform, which is one of the free web-based software provided by Google. Besides the fact that the platform is free to use, it was also chosen because of its ease of use, as it is compatible with both computer and mobile/hand-held devices. Additionally, the platform enables the prevention of participants from responding to the survey twice which helps to guarantee some level of quality in the process.

Subsequent to setting up the form, a link was generated from the platform and shared on social media posts for people to respond. The researcher shared social media posts for a month between 30th March and 30th April 2022 requesting that people take part in the survey. The researcher ensured to make the criteria for taking part in the survey known, and also enlisted friends and colleagues to share a similar post on their social media platforms. Besides these efforts, the researcher also requested that people who had shown interest in responding to the survey also share the post and recommend people they know who might fit the sample selection criteria and be interested in the survey. In the end, a total of 96 responses were received for the survey. All the respondents who participated in the survey responded to all

the questions as they were made mandatory, therefore ensuring that there were no cases of missing data or incomplete responses.

3.9 Data Analysis

In line with the research design adopted for this study, it adopted the descriptive and inferential analytical methods. The survey findings are summarized using basic statistical methods such as frequency tables, percentages, means, as well as charts. Subsequently, the researcher described the findings and made deductions based on the data. Conversely, the researcher adopted inferential statistical tools to test the research hypotheses. For example, in order to confirm if socio-demographic factors such as age, employment status, and marital status influence the perception of consumers on the impacts of COVID-19 on buying behaviour, the researcher adopted the Chi-square test for association (χ). Furthermore, an independent t-test is used to test that there is no statistically significant difference in the consumers' perception of COVID-19 impacts on the retail industry in Ireland. This allows for the comparison of mean differences in the response of the consumers. Finally, for both hypotheses, the null hypothesis is rejected if the p value is lower than 0.05, which would represent a 95% confidence level. Otherwise, the null hypothesis is accepted. For accurate data collation and efficient data analysis, all statistical tests are conducted with the IBM SPSS Statistics software version 25.

3.10 Ethical Consideration

Ethical consideration is another major part of research that contributes to research quality. This is concerned with researchers ensuring that studies involving human subjects is conducted in a manner that respects their fundamental rights. However, regardless that this is more critical in medical research, studies also carried out in other fields have to ensure that some basic actions are taken to consider the rights of the respondents. One of these rights is ensuring that they are provided with as much information as possible about the study in order for them to make informed decisions about their participation in the study. In line with this, the researcher provided a brief background to the study on their social media posts, requesting that people interested in participating follow a link, which provides further information and highlights the voluntary nature of the participation. Consequently, the respondents were provided with the option of not participating in the survey.

Moreover, the researcher adopted the principles of confidentiality and privacy in the data collection and management process. For one, the researcher turned off the option for respondents to leave their email addresses when responding to the survey. This was done in a bid to ensure that the data provided by each respondent cannot be linked back to them. Additionally, the researcher ensured that no other party was privy to the data by only storing

the database on the Google Drive that is linked to the researcher's Google Mail account. Finally, the data was only used for this study and subsequently purged from the researcher's storage at the end of the research.

3.11 Limitation of Study

A limitation to the research methodology is associated with the effects of the COVID-19 pandemic. Due to restrictions to physical contact, the researcher opted for the online method of data collection, which consequently led to some challenges in the data collection process. For one, some level of bias is likely to be introduced into the process as only consumers with online access and those that are familiar with the researcher in the online space will make up a majority of the research respondents. Moreover, even though the online data collection method has the potential to reach a large number of people, it was always difficult to achieve a high response rate when the method is adopted over the physical/in-person data collection method (Eger et al, 2021; Verma & Naveen, 2021).

3.12 Chapter Summary

This section of the research has covered a comprehensive description of the research methods adopted for the study. The chapter revealed that in line with similar studies, the descriptive and inferential research design approach has been adopted for the study, involving a combination of qualitative and quantitative methods for the data collection, data analysis and data presentation. Additionally, information on the research procedure and sampling procedure showed that the study focuses specifically on adult consumers who reside and shop from retail businesses in Dublin. However, because there is no adequate sample frame from which this population can be selected, the study adopted the online approach to selecting the sample population and putting in place strategies to ensure that the selection is inclusive.

Furthermore, the chapter covers a description of the data collection process, right from the data collection instrument design. The instrument was designed to have 36 questions adopted from several relevant studies and adapted to the current research context. Also, responding to the survey required respondents to choose from a five-point Likert scale, with all items ranked from 1 (strongly disagree) to 5 (strongly agree). Prior to concluding on the design, the survey instrument was piloted with a few respondents and a reliability test was conducted on the responses, which thus informed the refinement of the survey instrument for the actual data collection. Subsequently, the data collection was handled through the Google Forms platform, and the analysis was conducted using the SPSS v.25 software. Finally, the chapter also encompassed a description of the data analysis and presentation methods and processes, while ethical issues concerned with the research were also highlighted.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction and Socio-demographic Characteristics of Consumers of the Irish Retail Industry

This section focuses on the analysis and presentation of the survey data. From the collation of the data, it shows that a total of 96 consumers participated in the survey. All the participants responded to the entire questions, therefore resulting in 96 valid responses received for the study, as there were no cases of either missing data or incomplete responses (see Table 1). Subsequent to the data collation, the data was analysed using the IBM SPSS Statistics software (Version 25), through which descriptive tables were generated and presented in tables.

Table 1: Valid Responses for the Survey

		Responses
N	Valid	96
	Missing	0

Source: Generated from IBM SPSS 25

From the data presented in Table 2, the survey respondents encompass 45 consumers who identify as females, forming 46.9 percent of the total respondents, while there are 51 male consumers, equivalent to 53.1 percent of the respondents. This presents a good representation of consumers, as both male and female genders are adequately represented. Also, consumers between the ages of 18 and 29 years make up majority of the respondents, encompassing about two-thirds (66.7%) of the total respondents, while consumers between the ages of 30 and 45 years make up the remaining one-third (33.3%) of the total respondents. This shows that relatively young consumers responded more to the survey, as no one above the age of 45 years took part in the study. However, this could be a limitation brought about by the online method of sample selection adopted by the researcher for the study.

Furthermore, the socio-demographic data shows that majority of the consumers are employed (81.3%) compared to only few (8.3%) who are currently unemployed. Conversely, the information on the marital status of the consumers reveals that more than two-third of them (78.1%) are currently single, while only less than one-fifth (19.8%) are married. This data shows a clear linkage with the age of the respondents, as majority of the consumers are between the ages of 18 and 29 years old (see Table 2).

Table 2: Socio-demographic Information of Irish Consumers

	Variable	Frequency	Percent	Valid Percent
	Female	45	46.9	46.9
Gender	Male	51	53.1	53.1
	18-29	64	66.7	66.7
Age	30-45	32	33.3	33.3
	Employed	78	81.3	81.3
Employment	Unemployed	8	8.3	8.3
Status	Others	10	10.4	10.4
	Single	75	78.1	78.1
Marital Status	Married	19	19.8	19.8
	Others	2	2.1	2.1

Source: Author's Field Survey Data, Computed with IBM SPSS 25

Finally, the rest of the survey findings and analysis are presented thematically in line with the research objectives. To do this, a subsection is dedicated to each discussion beginning with the perception of the consumers on the impacts of COVID-19 on consumer buying behaviour in Ireland. This is followed by the presentation of findings on the perception of the consumers on the impacts of the pandemic on the Irish retail industry, consumer-retailer interactions, shopping activities, and finally the adaptive strategies of the consumers.

For the presentation of the findings on the perception of the consumers, the researcher relied chiefly on descriptive statistics, using frequency, percentage, mean and standard deviation (SD). For the mean, a benchmark of 3.5 was used to determine the validity of the consumers' response. This means that a mean score below 3.5 would be deemed as negative and the response rejected. Furthermore, the Chi-square test for association (χ) is adopted to test the relationship between the consumers' socio-demographic factors and their perception of COVID-19 impacts on consumer buying behaviour in Ireland at 0.05 alpha level, while an independent-samples t-test (t-test) was conducted to examine if statistically significant differences exist in how the consumers have responded on the impacts of COVID-19 on the retail industry in Ireland. All statistical tests were conducted using the IBM SPSS Statistics software (Version 25).

4.2 Analysis of Research Questions

4.2.1 Consumer Perceptions of the Impacts of the COVID-19 on Buying Behaviour in Ireland

Research Question 1: What is the impact of the COVID-19 pandemic on consumer buying behaviour?

In order to investigate the impact of COVID-19 on consumer buying behaviour in Ireland, the perception of 96 consumers was sought on a list of items (8) adapted from related literature carried out in other countries. Subsequently, the perception of the consumers was measured through a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Table 3 shows the mean response of the consumers on each of the variable.

Table 3: Mean and Standard Deviation of Consumers' Perception of the Impacts of the COVID-19 on Buying Behaviour in Ireland

S/No	Impacts of the COVID-19 on Buying Behaviour in Ireland	N	Mean	SD	Decision
1	Increased shift to digital/online purchasing	96	4.54	.767	Positive
2	Increased demand for essential items	96	4.09	.985	Positive
3	Increased awareness on healthier lifestyle	96	4.29	.972	Positive
4	Decrease in demand for luxury items	96	3.11	1.123	Negative
5	Reduction in in-store purchasing	96	3.99	.864	Positive
6	Change in frequency and size of purchases	96	3.71	.928	Positive
7	Change in consumption habits	96	3.66	1.186	Positive
8	Change in spending level	96	3.95	.966	Positive

Benchmark

3.5

Source: Author's Field Survey Data, Computed with IBM SPSS 25

As shown above, Table 4 reveals the mean score of the consumers' perception of COVID-19 impacts on buying behaviour in the Irish retail industry. A look at the table shows that all the items —except for a decrease in demand for luxury items—had a mean score higher than the benchmark of 3.5, indicating how consumer buying behaviour has been impacted amongst Irish consumers. For example, a mean score of 4.54 for an increased shift to digital/online purchasing indicates that the pandemic has caused Irish consumers to adopt online shopping portals in favour of brick-and-mortar stores. Similarly, according to the response of the consumers, the pandemic has caused an increased demand for essential items, increased awareness on healthier lifestyle, a reduction in in-store purchasing, a change in frequency and size of purchases, a change in consumption habits, and a change in spending level amongst consumers in Ireland. Conversely, decrease in demand for luxury items has a mean score of 3.11 which is lower than the benchmark, and thus represents a negative impact of COVID-19 on buying behaviour in the Irish retail industry.

Hypothesis 1

H₁: There will be a significant relationship between the consumers' gender and their perception of COVID-19 impacts on consumer buying behaviour in Ireland

Furthermore, based on existing theories that socio-demographic factors can predict consumer buying behaviour, the corresponding hypothesis was tested to investigate if the gender of the consumers has a statistically significant relationship on their perceptions of COVID-19 impacts on buying behaviour in Ireland. For this, the Chi-square test for association (χ) was used, and the null hypothesis is rejected when the relationship is statistically significant (i.e., p <.05), otherwise the null hypothesis is accepted. The result of the statistical analysis is presented in Table 4 below.

Table 4: Chi-square Test on the Relationship between Consumers' Gender and Buying Behaviour in Ireland

S/No		Female	Male	Total	Mean	χ²	p value
		n (%)	n (%)	N (%)			·
1	Increased shift to digital/on	, ,	` ′ [. , ,			
	Strongly agree	28 (29.2)	36 (37.5)	64 (66.7)			
	Agree	12 (12.5)	12 (12.5)	24 (25.0)			
	Uncertain	4 (4.2)	0 (0.0)	4 (4.2)	4.54	5.647	.130
	Disagree	1 (1.0)	3 (3.1)	4 (4.2)			
	Strongly disagree	0 (0.0)	0 (0.0)	0 (0.0)			
2	Increased demand for esse	ential items					
	Strongly agree	19 (19.8)	21 (21.9)	40 (41.7)		-	
	Agree	20 (20.8)	15 (15.6)	35 (36.5)			
	Uncertain	3 (3.1)	9 (9.4)	12 (12.5)	4.09	6.465	.167
	Disagree	2 (2.1)	6 (6.3)	8 (8.3)			
	Strongly disagree	1 (1.0)	0 (0.0)	1 (1.0)			
3	Increased awareness on he	ealthier lifestyle					
	Strongly agree	30 (31.3)	25 (26.0)	55 (57.3)			-
	Agree	3 (3.1)	17 (17.7)	20 (20.8)			
	Uncertain	10 (10.4)	7 (7.3)	17 (17.7)	4.29	14.465	.006
	Disagree	0 (0.0)	2 (2.1)	2 (2.1)			
	Strongly disagree	2 (2.1)	0 (0.0)	2 (2.1)			
4	Decrease in demand for lux	cury items					
	Strongly agree	11 (11.5)	3 (3.1)	14 (14.6)	3.11	7.592	.108
	Agree	5 (5.2)	9 (9.4)	14 (14.6)	5.11	1.552	.100

	Uncertain	21 (21.9)	26 (27.1)	47 (49.0)			
	Disagree	5 (5.2)	6 (6.3)	11 (11.5)			
	Strongly disagree	3 (3.1)	7 (7.3)	10 (10.4)			
5	Reduction in in-store purcha	sing					
	Strongly agree	14 (14.6)	14 (14.6)	28 (29.2)			
	Agree	22 (22.9)	24 (25.0)	46 (47.9)			
	Uncertain	5 (5.2)	10 (10.4)	15 (15.6)	3.99	1.527	.676
	Disagree	4 (4.2)	3 (3.1)	7 (7.3)			
	Strongly disagree	0 (0.0)	0 (0.0)	0 (0.0)			
6	Change in frequency and siz	ze of purchases	i				
	Strongly agree	11 (11.5)	8 (8.3)	19 (19.8)			
	Agree	20 (20.8)	19 (19.8)	39 (40.6)			
	Uncertain	14 (14.6)	18 (18.8)	32 (33.3)	3.71	6.650	.156
	Disagree	0 (0.0)	3 (3.1)	3 (3.1)			
	Strongly disagree	0 (0.0)	3 (3.1)	3 (3.1)			
7	Change in consumption hab	its					
	Strongly agree	18 (18.8)	9 (9.4)	27 (28.1)			
	Agree	15 (15.6)	16 (16.7)	31 (32.3)			
	Uncertain	10 (10.4)	13 (13.5)	23 (24.0)	3.66	12.383	.015
	Disagree	0 (0.0)	8 (8.3)	8 (8.3)			
	Strongly disagree	2 (2.1)	5 (5.2)	7 (7.3)			
8	Change in spending level						
	Strongly agree	22 (22.9)	12 (12.5)	30 (35.4)			
	Agree	12 (12.5)	18 (18.8)	30 (31.3)			
	Uncertain	11 (11.5)	15 (15.6)	26 (27.1)	3.95	10.422	.034
	Disagree	0 (0.0)	5 (5.2)	5 (5.2)			
	Strongly disagree	0 (0.0)	1 (1.0)	1 (1.0)			

Source: Author's Computations, Computed with IBM SPSS 25

Table 4 shows the result of the Chi-square test ran to determine if the consumers' buying behaviour is influenced by their gender. On the transition to online purchasing as a result of the pandemic, the test result shows that there is no statistically significant difference between female and male consumers ($\chi^2 = 5.647$, p = .130). This indicates that both female and male consumers switched to purchasing online due to the pandemic. Similarly, there is no relationship between the gender of the consumers and demand for essential items ($\chi^2 = 6.465$, p = .167) as well as demand for luxury items ($\chi^2 = 7.592$, p = .108, p = >.05) in the Irish retail industry. Additionally, the test result shows that there is no relationship between the consumers' gender and reduction in in-store purchasing ($\chi^2 = 1.527$, p = .676), further

confirming that both female and male consumers in the Irish retail industry had to reduce purchasing from physical stores in an attempt to avoid getting infected. Equally, both male and female consumers were found to adjust the size and frequency of their purchases during COVID-19 ($\chi^2 = 6.650$, p = .156).

However, among the 78.1% of consumers who agree that COVID-19 has resulted in an increased awareness on healthier lifestyle, 43.7% of them are male and 34.4% are female, with the test showing a statistically significant relationship between the female and male consumers ($\chi^2 = 14.465$, p = .006). This therefore suggests that there is an increased awareness on healthier lifestyle amongst men than women in Ireland. Also, change in consumption habits was found to be more common in women (34.4%) than in men (26.1%), with a statistically significant difference ($\chi^2 = 12.383$, p = .015), while a change in spending level due to the pandemic ($\chi^2 = 10.422$, p = .034) is more likely amongst female consumers (35.4%) than male consumers (31.3%).

4.2.2 Consumer Perceptions of the Impacts of the COVID-19 on the Retail Industry in Ireland Research Question 2: What is the impact of the COVID-19 pandemic on the retail industry in Dublin from the perspective of consumers?

A key objective of this study is to understand the impacts of COVID-19 on the retail industry in Ireland. Up to 10 issues had been found in existing literature on how the pandemic have impacted the retail industry globally. Therefore, this study requested the perception of Irish consumers to validate these impacts for the retail industry in Ireland. Similar to the previous section, the perception of the consumers is measured through a five-point Likert scale. The result of the survey is presented in Table 5.

Table 5: Mean and Standard Deviation of Consumers' Perception of the Impacts of the COVID-19 on the Retail Industry in Ireland

S/No	Impacts of the COVID-19 on the Retail Industry in Ireland	N	Mean	SD	Decision
1	Supply shortage and constant stockouts	96	3.72	1.063	Positive
2	Demand fluctuations	96	3.78	.943	Positive
3	Fall in sales	96	2.98	1.142	Negative
4	Disruptions to routine business processes and systems	96	4.00	.894	Positive
5	Reduced demand for non-essential items	96	3.49	1.056	Negative
6	Supply chain disruptions	96	3.99	.946	Positive
7	Increased investment in technology/e-commerce and omnichannel alternatives	96	4.05	1.009	Positive
8	Challenges of customer retention	96	3.82	1.016	Positive
9	Reduced customer satisfaction	96	3.21	1.205	Negative

3.5

Benchmark

Source: Author's Field Survey Data, Computed with IBM SPSS 25

According to the information provided in the table above, it can be inferred that the pandemic impacted the Irish retail industry by causing supply shortage and constant stockouts. A mean score of 3.72 (SD = 1.063) as generated from the response of the consumers is above the benchmark score and thus corroborated this. Also, a mean score of 3.78 (SD = 0.943) generated for demand fluctuations shows that the retail industry in Ireland experienced fluctuations in demand as a result of the pandemic. Conversely, there was no fall in sales (SD = 1.142) as the mean score of 2.98 falls short of the benchmark score of 3.5. However, this is regardless of the retail industry experiencing disruptions to routine business processes and systems due to the pandemic (mean = 4.00; SD = 0.894). Furthermore, the consumers did not find reduced demand for non-essential items as an impact of COVID-19 on the Irish retail industry (mean = 3.49; SD = 1.056), although supply chain disruptions were validated as an impact with a mean score of 3.99 (SD = 0.946). Additionally, in response to the disruptions to the retail industry, consumers observed that the retailers increased investment in technology/e-commerce and omnichannel alternatives in order to circumvent the challenges caused by the pandemic to usual operations (mean = 4.05; SD = 1.009). Similarly, the consumers validated challenges of customer retention as an impact (mean = 3.82; SD = 1.016) but rejected that the pandemic resulted in issues of consumer dissatisfaction in the retail industry (mean = 3.21; SD = 1.205). Finally, the survey revealed that retailer-consumer was impacted by COVID-19 in the retail industry of Ireland (mean = 3.61; SD = 1.118).

Hypothesis 2

10

H₂: The perception of consumers on the impacts of COVID-19 on the retail industry in Ireland will vary significantly according to their gender.

To test the corresponding to the consumers' perception of COVID-19 impacts on the retail industry in Ireland, the independent-samples t test was adopted. The test was adopted to examine the influence of the consumers' gender on their perception of impacts on the retail industry. For this, the perception of the consumers —measured on a 5-point Likert scale—represents the dependent variable, while the consumers —distributed into two groups based on their gender—represent the independent variable.

Furthermore, in order to ascertain the suitability of the chosen statistical test for the hypothesis, a number of assumptions were needed to be tested for the data in order for the result to be valid. One of these was to ensure that the data did not include significant outliers, and box plots were generated for the data from both females and males who responded to the survey.

The result of the box plots confirmed that the data contained no significant outliers (see Appendix 2). Also, the second assumption that needed to be tested was that of normality of distribution of the dependent variable for each group of the independent variable. For this, the researcher carried out the Shapiro-Wilk test of normality and also generated normal Q-Q plots for the data. Both tests revealed that there was normality of distribution of the response from both genders (see Appendix 3). Finally, the data needed to pass the test for homogeneity of variances. For this, the researcher relied on Levene's test for equality of variances, and the result guaranteed that there was homogeneity of variances in the data (see Appendix 4). All the tests were conducted using IBM SPSS v.25.

The results of the independent-samples t test conducted to test the hypothesis are presented in Table 6. In order to decide that there is a statistically significant difference in the perception of the consumers based on their gender, a *p* value of less than 0.05 is required. Otherwise, it is concluded that there is no statistically significant difference in the perception of the consumers on the impacts of COVID-19 on the Irish retail industry.

Table 6: Mean and Standard Deviation of Consumers' Perception of the Impacts of the COVID-19 on the Retail Industry in Ireland

S/No		Female		Male		t	p value
		Mean	SD	Mean	SD		
1	Supply shortage and constant stockouts	3.73	1.136	3.71	1.006	126	.900
2	Demand fluctuations	3.98	.866	3.61	.981	-1.947	.055
3	Fall in sales	2.93	1.156	3.02	1.140	.368	.714
4	Disruptions to routine business processes and systems	4.13	.968	3.88	.816	-1.378	.171
5	Reduced demand for non-essential items	3.76	.957	3.25	1.093	-2.373	.020
6	Supply chain disruptions	4.16	.952	3.84	.925	-1.629	.107
7	Increased investment in technology/e- commerce and omnichannel alternatives	4.13	.991	3.98	1.029	739	.462
8	Challenges of customer retention	4.09	.821	3.59	1.117	-2.474	.015
9	Reduced customer satisfaction	3.27	1.321	3.16	1.102	444	.658
10	Reduced retailer-consumer interactions	3.67	1.206	3.57	1.044	427	.670

Source: Author's Field Survey Data, Computed with IBM SPSS 25

Table 6 shows the results of the t-test conducted to check if statistically significant differences exist in the impacts of COVID-19 on the Irish retail industry according to the consumers. The test result shows that only on the impacts "reduced demand for non-essential items" and "challenges of customer retention" that statistically significant differences exist between female and male consumers. For "reduced demand for non-essential items" the perception was stronger for female consumers $(3.76 \pm .957)$ than for male consumers (3.25 ± 1.093) , t(94) = -2.373, p = .020. Similarly, female consumers had a stronger perception of the retail industry facing challenges of customer retention due to COVID-19 $(4.09 \pm .821)$ than male consumers (3.59 ± 1.117) , t(94) = -2.474, p = .015.

However, the study has found no statistically significant differences between female and male consumers in their perception on the rest of the impacts (p = > .05). It is thus concluded that gender had no influence on the perception of the consumers on the rest of impacts of COVID-19 on the retail industry in Ireland.

4.2.3 Consumer Perceptions of the Impacts of the COVID-19 on consumer-retailer Interactions in Ireland

Research Question 3: How has COVID-19 impacted consumer-retailer interactions in Ireland, Dublin?

Another objective of this study is to assess how COVID-19 has impacted on consumer-retailer relationship in the retail industry of Ireland. In line with this, the survey requested from the consumers their perception on the impact of the pandemic on physical interactions in the Irish retail industry. Four items were taken from existing literature to measure the impact on interactions between the consumers and the retailers, and the feedback from the consumers is analysed to generate mean and standard deviation statistics, as presented in Table 6 below.

Table 6: Mean and Standard Deviation of Consumers' Perception of the Impacts of the COVID-19 on Consumer-Retailer Interactions in the Retail Industry of Ireland

S/No	Impacts of the COVID-19 on Consumer-Retailer Interactions in the Retail Industry in Ireland	N	Mean	SD	Decision
1	Limited physical interactions/communication	96	3.99	1.061	Positive
2	Increased communication through digital channels	96	4.48	.846	Positive
3	Increase in frequency of email marketing	96	4.10	.957	Positive
4	Increased information on COVID-19 safety guidelines	96	4.47	.820	Positive

Benchmark

3.5

Source: Author's Field Survey Data, Computed with IBM SPSS 25

The information presented in the table shows that COVID-19 impacted consumer-retailer interactions in the Irish retail industry. Firstly, the perception of the consumers on the pandemic

leading to limited physical interactions is validated with a mean score of 3.99 (SD = 1.061), suggesting that COVID-19 impacted consumer-retailer interactions through limited physical interaction in Ireland. Also, a mean score of 4.48 (SD = 0.846) for increased communication through digital channels confirmed the impact of the pandemic on the retail industry, while a mean score of 4.10 (SD = 0.957) reveals that COVID-19 has impacted consumer-retailer interactions by leading to an increase in the frequency of email marketing received by the consumers. Finally, communications from retailers to consumers during the pandemic focused majorly on information on COVID-19 safety guidelines. This is confirmed with the mean score of 4.47 (SD = 0.957).

4.2.4 Consumer Perceptions of the Impacts of COVID-19 on Shopping in Ireland

Research Question 4: What challenges are consumers facing in their shopping activities during the COVID-19 pandemic?

This part of the study presents the findings of the survey on the challenges encountered by Irish consumers in their shopping activities as a result of the pandemic. To test the consumers' experiences of shopping during COVID-19, the researcher adopted 8 items from existing studies and requested the perception of Irish consumers. The response generated is analysed with mean and standard deviation and subsequently presented in Table 7.

Table 7: Mean and Standard Deviation of Consumers' Perception of the Impacts of the COVID-19 on Shopping in Ireland

S/No	Impacts of the COVID-19 on Shopping in the Retail Industry of Ireland	N	Mean	SD	Decision
1	Unsatisfactory purchasing experience	96	3.30	1.087	Negative
2	Poor customer service	96	2.98	1.133	Negative
3	Longer waiting time to purchase at physical stores	96	3.59	1.228	Positive
4	Shortage of essential items	96	3.45	1.123	Negative
5	Changes in the store layout	96	3.79	1.015	Positive
6	COVID-19 prevention and safety guidelines	96	4.36	0.796	Positive
7	General dissatisfaction	96	2.99	1.091	Negative
8	Minimal interactions with other shoppers and store personnel	96	4.13	0.897	Positive

Benchmark

3.5

Source: Author's Field Survey Data, Computed with IBM SPSS 25

The analysis of the perception of Irish consumers on the impacts of COVID-19 on shopping in the country as presented in the table highlights which of the factors are applicable to the retail sector in Ireland. From the information, it is clear that the consumers did not experience unsatisfactory purchasing services (mean = 3.30; SD = 1.087) or poor customer services

(mean = 2.98; SD = 1.133) in the retail sector. However, a mean score of 3.59 (SD = 1.228) reveals that purchasing at the physical stores took longer time than usual during the pandemic in Ireland, although the consumers did not experience a shortage of essential items (mean = 3.45; SD = 1.123) as in other countries. Conversely, the consumers did find that changes made in the layout of stores to reduce transmission of the virus as a challenge to shopping activities (mean = 3.79; SD = 1.015) as well as other prevention and safety guidelines (mean = 4.36; SD = 0.796). Finally, with a mean score of 2.99 (SD = 1.091) the consumers disagree that COVID-19 caused general dissatisfaction for consumers on shopping in the Irish retail industry, but found the reduced level of interactions caused by the pandemic a challenge to shopping activities in Ireland (mean = 4.13; SD = 0.897).

4.2.5 Consumer Perceptions on the Adaptive Measures of Irish Consumers during the COVID-19 Pandemic in Ireland

Research Question 5: How are Consumers adapting to the new circumstances resulting from the COVID-19 pandemic?

The final objective of this study is to understand some of the adaptive strategies of Irish consumers to the issues arising from COVID-19. Therefore, for this component, 5 items were considered, on which the perception of Irish consumers was sought. The response analysed by mean and standard deviation is presented in Table 8.

Table 8: Mean and Standard Deviation of Consumers' Perception of the Adaptive Strategies to the Impacts of the COVID-19 in the retail industry of Ireland

S/No	Consumers' Adaptive Strategies to Impacts of the COVID-19 in the Retail Industry of Ireland	N	Mean	SD	Decision
1	Switch to online and alternative shopping modes	96	4.19	1.039	Positive
2	Increase in the frequency and size of purchases	96	3.81	1.019	Positive
3	Reduction in Discretionary Spending	96	3.82	.995	Positive
4	Strict adherence to COVID-19 safety guidelines	96	4.09	.822	Positive
5	Increased awareness of security risks associated with e-commerce	96	3.81	.874	Positive

Benchmark

3.5

Source: Author's Field Survey Data, Computed with IBM SPSS 25

In response to the impacts of COVID-19 on retail activities in Ireland, the consumers switched from shopping in physical stores to online and other alternative modes of shopping. This is seen from the mean score of 4.19 (SD = 1.039), which is more than the benchmark. Also, a mean score of 3.81 (SD = 1.019) reveals that consumers in the retail industry of Ireland increased their purchases during COVID-19 (mean = 3.81; SD = 1.039). Additionally, a mean score of 3.82 (SD = 0.995) shows that t consumers in Ireland resulted to reducing their

discretionary spending as a way to adapt to the challenges of COVID-19, while it is also seen that consumers in the retail industry of Ireland adopted a strict adherence to COVID-19 safety guidelines as a way of adapting to the situation in the pandemic (mean = 4.09; SD = 0.822). Finally, a mean response score of 3.81 (SD = 0.874) indicates that Irish consumers became more aware of the security risks associated with shopping online during the pandemic. It is thus concluded that COVID-19 made noticeable impacts on Irish consumers in terms of adapting to the pandemic situation.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

COVID-19 and its unprecedented impacts globally has generated numerous studies. Also, the retail industry as one of the most affected economic sector has generated several attentions, with numerous impacts highlighted, most notably on consumer behaviour. It was thus in line with these that this study set out to measure the impacts of the pandemic on the retail industry in Ireland through the perception of the consumers. Specifically, the study has measured the perception of the consumers on the impacts of the pandemic on consumer buying behaviour, the retail industry, consumer-retailer interactions, and shopping activities. Additionally, the study measured the perception of the consumers on the various adaptive strategies adopted by consumers as a result of the COVID-19 impacts in the retail industry.

Subsequent to the analysis and presentation of the research findings in the previous chapter, this chapter presents a discussion of the findings, with a focus on how the findings fit within existing literature. Therefore, the chapter is sub-divided to follow the objectives of the study.

5.2 Impacts of the COVID-19 on Buying Behaviour in Ireland

In order to examine the impacts of COVID-19 on consumer buying behaviour in Ireland, eight items were adopted from existing literature. Subsequently, the study measured the perception of the consumers on these items to determine the specific changes in consumer buying behaviour as a result of the pandemic. Specific themes under consumer buying behaviour as observed by this study are discussed as follows:

5.2.1 Consumers' Preferred Shopping Channel during COVID-19

This study found that COVID-19 resulted in an increased shift of consumers to digital/online purchasing, from making purchases in physical stores. This finding is consistent with several existing study, especially those conducted during the pandemic. For example, Showrav et al (2021) had found that at the peak of the pandemic in Bangladesh, consumers switched from purchasing in physical stores to online platforms. According to the authors, the consumers had reported that the benefits of shopping online, as well as technological support and convenience influenced their choice of shopping channel. Similarly, Vázquez-Martínez et al (2021) in a study conducted in over 55 countries had found that more consumers switched to online channels for their purchases. The authors linked this behaviour to what they termed an exigency motivation, which is described as emanating from the circumstances of the pandemic. The studies by Eger et al (2021) and Szymkowiak et al (2020) may have described this motivation as their respective studies show that the consumers switched their purchasing

channel due to the fear of contracting the virus in physical stores. Therefore, this study concludes that Irish consumers had switched from shopping in physical stores to the online store due to the benefits accruable from using the channel, which included convenience from the mode of shopping, as well as the reduced risk of contracting the virus.

5.2.2 Consumer's Types of Purchases during COVID-19

On consumers' choice of product types as a result of the pandemic, this study found that there was an increase in the demand for essential items amongst Irish consumers. This indicates that the pandemic influenced utilitarian motivations in the consumer, which is consistent the findings from several earlier studies. For example, it has been established that crises influence people to focus more on buying necessities rather than luxury items (Mansoor & Jalal, 2011; Bohlen et al., 2009), while this was also found to be true for COVID-19 (Di Crosta et al., 2021; Eger et al., 2021; Vázquez-Martínez et al., 2021). However, this study could not confirm that COVID-19 caused a decrease in demand for non-essential by consumers in Ireland as with previous studies in other countries. In line with this, Di Crosta et al (2021) associated the behaviour with depression as a result of the pandemic.

Furthermore, this study observed that the pandemic increased the awareness of Irish consumers on a healthier lifestyle, which ultimately influenced their consumption habits. These are also grounded in existing literature, as found in the study by Bender et al (2022), Das et al (2021), Eger et al (2021), and Verma and Naveen (2021). For example, it has been established that consumers in different countries became more aware of a healthier lifestyle due to fears on contracting the virus, and in turn made more purchases of items such as medicines and healthcare and hygiene products (Das et al., 2021; Eger et al., 2021; Verma & Naveen, 2021). Another way consumers made lifestyle changes influenced by health awareness during the pandemic was through their food consumption. For example, more consumers switched to home-cooked foods and reportedly minimised food wastage, having invested in cold storage equipment and other apparatus which enabled these changes (Bender et al., 2022; Eger et al., 2021). All of these therefore confirm that the findings made by this study on Irish consumers are consistent with consumer behaviours in other geographic locations.

5.2.3 Consumers' Spending Level, Frequency and Size of Purchases

Further on the impacts of COVID-19 on consumer buying behaviour in Ireland, this study found that there was a change in the frequency and size of purchases made, also accompanied with a change in spending level of consumers during the pandemic. In several studies, consumers were observed to engage in larger purchases than they usually make —a phenomenon referred to as panic buying (Barnes et al., 2021; Eva et al., 2021; Hall et al., 2021; Prentice et

al., 2021). Furthermore, this situation is observed to be influenced by fear and anxiety about the pandemic (Barnes et al., 2021; Hall et al., 2021; Yuen et al., 2020), which occurred before and early days in the lockdown imposed in some of the countries to mitigate the spread of the COVID-19 virus (Di Crosta, et al., 2021). However, another factor of the purchasing behaviour was attributed to the aftermath of stimulus checks issued by some governments to ease the economic impacts of the pandemic on the people (Yang et al., 2021; Kubota et al., 2021; Prentice et al, 2021). This therefore led to a general increase in spending during the period (Di Crosta, et al., 2021).

5.2.4 The Mediating Effect of Gender

This study found that the effect of gender was statistically significant for some of the changes in consumer behaviour due to COVID-19. For example, there is an increased awareness on healthier lifestyle amongst men than women and change in consumption habits was found to be more common in women than in men. Also, the study found that change in spending level due to the pandemic more likely amongst female consumers than male consumers. These findings thus support existing literature on the impacts of consumer gender on buying behaviour.

5.3 Impacts of the COVID-19 on the Retail Industry in Ireland

In order to examine the impacts of COVID-19 on the retail industry in Ireland, 10 items were assessed. Specific themes of discussion under this section include the impact of the pandemic on businesses processes and systems, demand, supply, and consumer services and satisfaction.

5.3.1 Business Processes and Systems in the Retail Industry in Ireland

On business processes and systems in the Irish retail industry, this study observed that COVID-19 disrupted routine operations processes for retailers. Also, retailers in Ireland experienced supply chain disruptions, which transcended routine operations to affect other aspects such as the supply network, demand, and inventory management. Perhaps the biggest impact of the pandemic on the retail industry is in its disruptions to business processes, as well as the supply chain generally, as corroborated by several studies (Lafrogne-Joussier et al., 2022; Clemens et al., 2020; Paul & Chowdury, 2020). These disruptions manifested in several ways and affected retail businesses differently. Businesses with products not considered as essential had to close down in most countries, while those offering essential goods had to adjust their processes to limit the spread of the virus. Some of these adjustments, which included facilitating social distancing and providing hygiene services occurred on a

never-before-seen scale globally and were largely inconvenient for both the retailers and consumers.

However, regardless of the recorded disruptions, this study confirmed that retailers in Ireland made increased investment in the adoption of technology, e-commerce, and developing omnichannel alternatives. This also corresponds to studies conducted in other parts of the world (Cruz-Cárdenas et al., 2021; Oldekop et al., 2020; Pantano et al., 2020) confirming that in response to the disruptions caused by COVID-19, retailers began to implement an increased switch to e-commerce and adopting technology to mitigate the impacts of the pandemic. This thus provides the retail industry in Ireland an opportunity to build resilience into their supply chain through the adoption of technological tools.

5.3.2 Demand and Supply in the Retail Industry in Ireland

Measuring the demand situation in the retail industry in Ireland due to impacts of COVID-19, this study could not confirm that consumers reduced their purchase of non-essential items, which contradicts findings from several studies conducted in other parts of the world (Di Crosta et al., 2021; Eger et al., 2021; Vázquez-Martínez et al., 2021). The implication of this on the retail industry is that the impact of the pandemic might not have been unfavourable for retail businesses dealing in non-essential items like their counterparts in other areas.

Furthermore, on the supply side, this study confirmed that retail stores in Ireland encountered challenges of supply shortage and constant stockouts. Existing literature also observed this phenomenon, and subsequently ascribed the challenge to two factors, notably supply chain disruptions and the rate of panic buying which consumers engaged in in some locations (Banker, 2021; Clemens et al., 2020; Kostev & Lauterbach, 2020; Paul & Chowdury, 2020; Schmidt et al., 2021; Wieczner, 2020). However, in contrast with observations of the economic impacts of the pandemic, this study could not confirm that retailers in Ireland experienced a fall in sales.

5.3.3 Customer Service and Satisfaction in the Retail Industry in Ireland

On customer service in the Irish retail industry, this study observed that the pandemic impacted negatively on retailer-consumer interactions. This is consistent with the observations of Koren and Pető (2020). Communications and general interactions were affected due to the social distancing directives. Another possible reason for the reduced interactions is the switch to online shopping platforms, which meant that the benefit of physical interactions is lost by consumers who value this as part of the shopping experience.

Reduced communications in the retail sector, as well as other challenges of shopping during COVID-19 did not however lead to reduced customer satisfaction amongst the Irish

consumers as observed in this study. This is in contrast to previous observations of poor customer experience and general dissatisfaction among consumers (Di Crosta et al, 2021; Peachy, 2021; Pickup, 2021). However, this study did confirm that retailers encountered challenges of customer retention due the impacts of the pandemic. Similarly, Al-Ghraibah (2020) observed the challenge of customer retention for online retailers in Saudi Arabia and thus concluded that factors such as responsiveness, customer satisfaction, ease of use and attitude predicts customer retention.

5.4 Impacts of the COVID-19 on Consumer-Retailer Interactions in the Retail Industry in Ireland

Four items were taken from existing literature to measure the impact of COVID-19 on interactions between consumers and retailers. Firstly, the study confirmed that the pandemic resulted in limited physical interactions/communication in the retail industry. This is attributed to issues as observed in the work of Eger et al (2021), Showrav et al (2021), Vázquez-Martínez et al (2021), and Koren and Pető (2020). These issues include the observed shift from shopping in traditional brick-and-mortar stores to online shopping, as well as the COVID-19 mitigating measures of social distancing. Therefore, this study confirmed that an increase in communication through digital channels was observed, especially with an increase in the frequency of email marketing during the period. Another type of communication which had prominence was information on COVID-19 safety guidelines, both in physical stores and online platforms, as retailers took up the responsibility to leverage their position to reduce the spread of the virus. These findings on the impact of the pandemic on interactions in the Irish retail industry were consistent with observations of Qua et al (2021) and Shumsky et al (2021).

5.5 Impacts of COVID-19 on Shopping in the Retail Industry in Ireland

In order to measure the consumers' experiences of shopping during COVID-19, eight items were adopted from existing studies. The findings of the study under this section are discussed under positive and negative consumer experiences.

5.5.1 Positive Consumer Experience of Shopping

To begin with, this study found that consumers did not experience poor customer service from retailers due to the pandemic. Also, the consumers confirmed that they did not experience neither an unsatisfactory purchasing experience nor a general level of dissatisfaction with shopping during the COVID-19 crisis in Ireland. This is thus commendable, as it is in contrast with observations in other parts of the world as confirmed by the studies of Di Crosta et al (2021), Lawal et al (2021) Peachy (2021), and Pickup (2021).

5.5.2 Negative Consumer Experience of Shopping

In contrast to the positive shopping experiences of Irish consumers, this study confirmed that consumers experienced longer waiting times than usual in order to make purchases at physical stores during the pandemic. This finding is similar to the observation of Pantano et al (2020) that longer waiting time to shop was a result of social distancing measures imposed to curb the spread of COVID-19. Additionally, a shortage of essential items is a challenge that is closely related to the longer waiting time to shop as experienced by the consumers. This was confirmed by the study of Janssen et al (2021) with the observation that this happened as a result of consumers who had stockpiled on products in anticipation of the lockdown phase (Laato et al., 2021; Schmidt et al., 2021; McKevitt, 2020).

Furthermore, the study found that changes effected in stores' layout were inconvenient to the consumers. Similarly, the consumers reported that the COVID-19 prevention and safety guidelines were strange and tiresome. These changes had been necessary so as to minimise the spread of the virus amongst the people and include shutting down some businesses and restricting those allowed to open to guidelines such as the size of customers allowed at a time, as well as wearing of face masks and constant temperature checks. The guidelines thus ultimately resulted in limited physical interactions amongst consumers and with retailers. Conclusively, these findings are consistent with early studies conducted by Eroglu et al (2022) and Shumsky et al (2021).

5.6 Adaptive Measures of Irish Consumers during the COVID-19 Pandemic in Ireland

In response to the issues and challenges of shopping in Ireland due to COVID-19, five items were adopted to measure how consumers have adapted based on factors established by existing literature. The study found that all the items measured were positively confirmed as adaptive measures by the consumers. Firstly, the study found that consumers in Ireland also switched from shopping in physical stores to online and alternative shopping modes. This thus corresponds with some of the findings conducted by researchers in other parts of the world (Eger et al., 2021; Showrav et al., 2021; Vázquez-Martínez et al., 2021; Szymkowiak et al., 2020).

Furthermore, consumers in the Irish retail industry confirmed that increasing the frequency and size of purchases is a way of adapting to perceived issues of the pandemic. This also confirms findings of Barnes et al (2021), Eva et al (2021), Hall et al (2021) and several other researchers who found that consumers increased their purchases from pre-COVID times, as a way of avoiding scarcity of items. Also, this study found that consumers reduced their discretionary spending and bought more essential items. Several studies had noted that prompted by the situation of the pandemic, consumers bought more essential items such as

food, medicines, healthcare, and hygiene products, and bought less of items like entertainment and other non-essential items (Di Crosta et al., 2021; Eger et al., 2021; Vázquez-Martínez et al., 2021).

Finally, this study confirmed that consumers maintained strict adherence to COVID-19 safety guidelines, and also became aware of the security risks associated with the use of ecommerce due to its increase in popularity during the pandemic. These thus validate existing studies (Aseri, 2021; Pabian et al., 2020). Existing literature had found that consumers were bothered about the threats involved during payment, such as being charged wrongly for items not purchased or more than the cost of items purchased. Also, the perceived threat extends to worries about discrepancies between the actual product delivered and the description provided on the digital store, as well as worries about loss of their products in transit, receiving damaged goods or taking delivery of the wrong products. These can thus describe how the consumers in Ireland have adjusted to using the online mode of shopping as earlier established.

5.7 Chapter Summary and Conclusion

This chapter focused on a discussion of findings from the data collection and analysis phases on the research objectives. Particularly, the sections discussed these findings in line with existing literature in relevant areas. Consequently, the study made interesting findings and observed linkages with some of the studies earlier carried out in different other areas on the impacts of COVID-19 on the retail industry and consumer behaviour. Some of the specific findings include retailers switching to e-commerce and other business alternatives and also a corresponding transition of consumers to online purchasing. Also, other findings include increased demand for basic items by consumers, change in frequency and size of purchases from pre-pandemic times, and change in consumption habit influenced by lifestyle changes. These observations corroborates existing findings by studies conducted in other parts of the world and thus offer valuable insight into how disruptions of a magnitude of COVID-19 can affect different facets of retail life in Ireland.

CHAPTER SIX

6.0 CONCLUSION

6.1 Introduction and Summary of Findings

This study set out to understand the impacts of the COVID-19 pandemic had on the retail industry in Ireland. The findings revealed that the pandemic had considerable impacts on various facets of the retail industry in the country. On consumer behaviour, the study shows that consumers in Ireland transitioned from shopping in physical stores to online platforms. Further to that, consumers increased their demand for essential items, including both frequency and size of the purchases. However, in contrast with the increased demand for basic needs, the study could not confirm that there was a corresponding decrease in demand for non-essential items. Additionally, the pandemic caused an increased level of awareness about healthier lifestyles and influenced a change in the consumption habits of the consumers. The effect of gender was also observed on the behavioural change in consumer behaviour, especially for awareness on healthier lifestyle, change in consumption habits and spending level.

Furthermore, this study demonstrated that in line with observations in other parts of the world, the retail industry in Ireland also experienced supply chain disruptions with associated effects like supply shortages and stockouts, and demand fluctuations. Also, the retailers experienced disruptions to routine business processes, and faced challenges of customer retention. In turn, the study found that the retailers took advantage of technology to remain competitive during the pandemic. Moreover, for the consumers, the study identified the challenge of reduced retailer-consumer interactions, as well as issues such as longer waiting time to purchase at physical stores, changes in store layout, and minimal interactions with other shoppers and store personnel.

6.2 Contribution and Implications

This research makes several contributions to existing knowledge on impacts of the COVID-19 globally, and especially for the retail sector of the macroeconomy. For one, the study has been able to confirm several of the observed behavioural changes in consumers due to the pandemic, as well as in times of crises generally. These include buying motivation and types of purchases made, frequency and size of purchases, and general spending level. Also, the study confirmed that the effects of COVID-19 in other areas are also true for the retail industry in Ireland, especially on disruptions caused to the supply chain and general business processes. The study also observed that consumer shopping patterns in the retail industry of Ireland align with observed patterns in some other parts of the world, including fluctuating

demand and an increase in the demand for basic items. However, perhaps more noteworthy is the confirmation of the transition of the retailers from brick-and-mortar stores to online platforms and other channels. All of these findings thus consolidate existing knowledge by providing proof in another part of the world.

Furthermore, the study has an implication for practitioners in the retail industry, most especially in Ireland. The pandemic brought about an unprecedented level of disruptions to economies globally, with the retail sector also experiencing significant disruptions to the supply chain. Therefore, as the pandemic and its impacts came as a shock, some of the findings of this study can provide valuable insights into different aspects of the retail business when impacted by a crisis of the magnitude of COVID-19. For example, the findings on consumer behaviour can assist in designing a supply chain that is resilient to the unpredictability of consumers during this time. This study has shown that consumers tend to focus their purchases on basic items, while also buying large amounts of it. As this particularly led to stockouts during the height of the pandemic, retailers will now be able to prepare better to avoid similar occurrences in the future. Also, consumer-retailer relationship suffered during the pandemic, as customers had to deal with restrictions and also make more purchases online. Therefore, as this can have an implication for customer retention, it is necessary that retailers and other practitioners come up with digital campaigns that make customers continue to feel valued regardless of the channel of interaction.

6.3 Limitations and Recommendations for Further Study

There are a few limitations to this study which can help to inform future studies. For one, the study intended to only confirm the applicability of the observed impacts of the COVID-19 pandemic on the retail sector to the Ireland retail situation. Therefore, the study could not verify the exact factors responsible for some of the observations in the retail sector in Ireland, as well as the extent and dimension with which they occurred. For example, the study confirmed that there was an increase in the demand for essential items in the retail sector but could not identify what category of items consumers purchased more than the other. In line with this, some researchers had identified that consumers purchased more items which include food, medical supplies, personal and home care products, and hygiene products (Di Crosta et al., 2021; Eger et al., 2021; Vázquez-Martínez et al., 2021; Verma & Naveen, 2021). Also, as refrigerating systems would have been considered as a non-essential item, a study found that consumers invested more on this in order to enable them store and cook more food during the isolation. Therefore, future research in the Irish retail industry can seek to identify what items consumer purchased more, as this will further assist retailers in future crises. This is also

applicable to other aspects of the findings in this study, and future research can focus disentangling the factors and dimensions of the changes which occurred due to the pandemic.

Furthermore, this study focused on consumers' perception of the impacts of the COVID-19 pandemic, and it is unclear how reliable their observations would be, especially considering that the study was not carried out during the peak of the pandemic when perceptions of the impacts would likely be the strongest. In this light, a future research direction would be to seek the perceptions of the retailers and other practitioners on how the pandemic has impacted their aspects of the retail chain. Also, it is likely that changes in consumer behaviour will continue to evolve till the eventual post-COVID phase. Therefore, a future study will need to capture these changes, as well as any other development in the observed impacts of the pandemic on other areas of the retail industry in Ireland.

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APPENDIX I

Research Questionnaire

A. Demographic characteristics of respondents

1.	Gender:	Female []	Male []	Rather not say []
2.	Age range:	Below 18 []	18-29 []	30-45 []
3.	Employment status:	Employed []	Unemployed []	Others []
4.	Marital status:	Single []	Married []	Others []

B. Impacts of the COVID-19 on consumer buying behaviour

Kindly assess the following items according to your perception of how the COVID-19 pandemic have impacted consumer buying behaviour in Ireland.

		Perception Levels					
S/N	Impacts	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)	
1.	Increased shift to digital/online purchasing						
2.	Increased demand for essential items						
3.	Increased awareness on healthier lifestyle						
4.	Decrease in demand for luxury items						
5.	Reduction in in-store purchasing						
6.	Change in frequency and size of purchases						
7.	Change in consumption habits						
8.	Change in spending level						

C. Impacts of the COVID-19 on the retail industry

Kindly assess the following items according to your perception on the impacts of the COVID-19 pandemic on the retail industry in Ireland.

		Perception Levels					
S/N	Impacts	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)	
1.	Supply shortage and constant stockouts						
2.	Demand fluctuations						
3.	Fall in sales						
4.	Disruptions to routine business processes and systems						
5.	Reduced demand for non-essential items						
6.	Supply chain disruptions						
7.	Increased investment in technology/e-commerce and omnichannel alternatives						
8.	Challenges of customer retention						
9.	Reduced customer satisfaction						
10.	Reduced retailer-consumer interactions						

D. Impacts of the COVID-19 on consumer-retailer interactions

Kindly assess the following items according to your perception of how the COVID-19 pandemic have impacted consumer-retailer interactions in the retail industry of Ireland.

		Perception Levels					
S/N	Impacts	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)	
1.	Limited physical interactions/communication						
2.	Increased communication through digital channels						
3.	Increase in frequency of email marketing						
4.	Increased information on COVID- 19 safety guidelines						
5.	Reduction in the availability of essential items						

E. Challenges in shopping activities during the COVID-19 pandemic

Kindly assess the following items according to your perception of the challenges of shopping during the COVID-19 pandemic in Ireland.

		Perception Levels					
S/N	Strategies	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)	
1.	Unsatisfactory purchasing experience						
2.	Poor customer service						
3.	Longer waiting time to purchase at physical stores						

4.	Shortage of essential items			
5.	Changes in the store layout			
6.	COVID-19 prevention and safety guidelines			
7.	General dissatisfaction			
8.	Minimal interactions with other shoppers and store personnel			

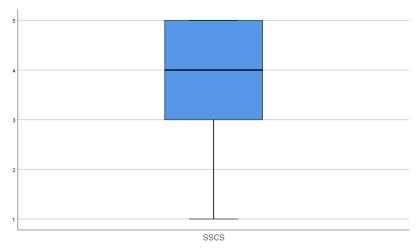
F. Consumer adaptation strategies to the impacts of the COVID-19 pandemic on shopping

Please, assess the following items according to your perception of consumer adaptation strategies during the COVID-19 pandemic in Ireland.

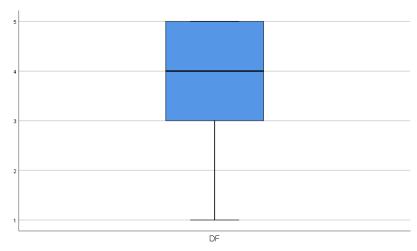
		Perception Levels					
S/N	Strategies	Strongly disagree (1)	Disagree (2)	Uncertain (3)	Agree (4)	Strongly agree (5)	
1.	Switch to online and alternative shopping modes						
2.	Increase in the frequency and size of purchases						
3.	Reduction in discretionary spending						
4.	Strict adherence to COVID-19 safety guidelines						
5.	Increased awareness of security risks associated with e-commerce						

APPENDIX 2

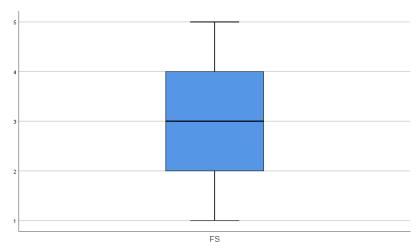
Test for Outliers in Respondents Data on Impacts of COVID-19 on the Retail Industry in Ireland



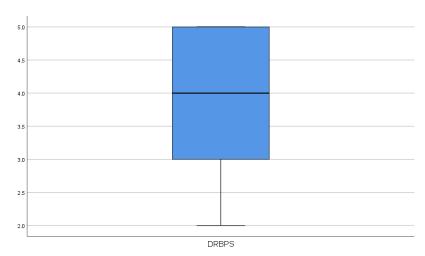
Box Plot for supply shortage and constant stockouts



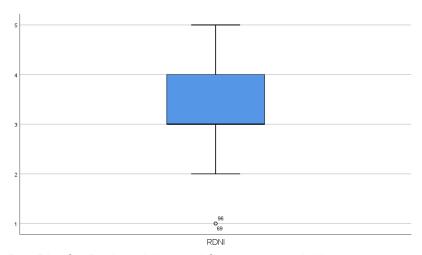
Box Plot for Demand fluctuations



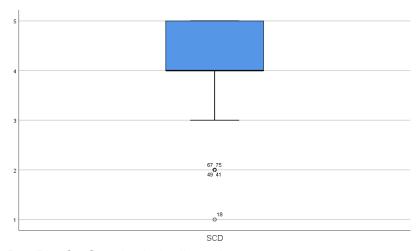
Box Plot for Fall in sales



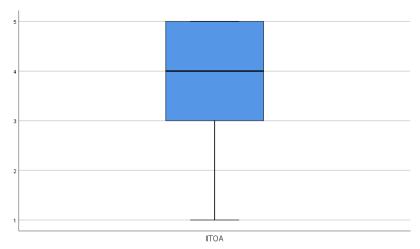
Box Plot for Disruptions to routine business processes and systems



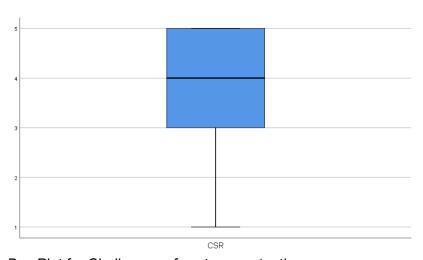
Box Plot for Reduced demand for non-essential items



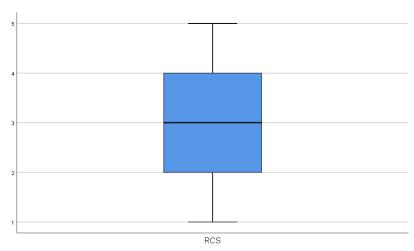
Box Plot for Supply chain disruptions



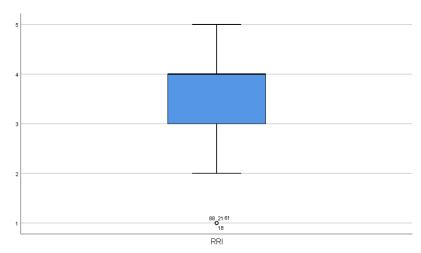
Box Plot for Increased investment in technology/e-commerce and omnichannel alternatives



Box Plot for Challenges of customer retention



Box Plot for Reduced customer satisfaction



Box Plot for Reduced retailer-consumer interactions

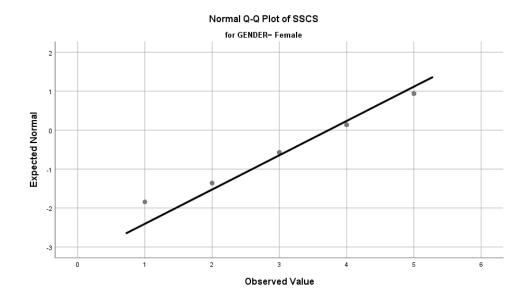
APPENDIX 3
Shapiro-Wilk test of Normality

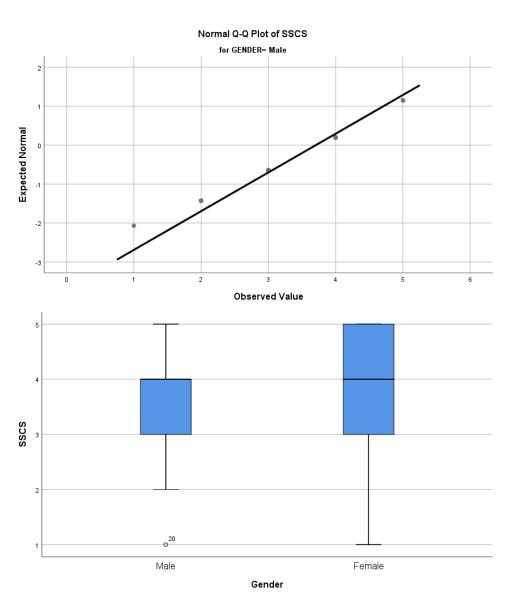
Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Gender	Statistic	df	Sig.	Statistic	df	Sig.
SSCS	Male	.223	51	.000	.888	51	.000
	Female	.201	45	.000	.863	45	.000
DF	Male	.203	51	.000	.872	51	.000
	Female	.248	45	.000	.773	45	.000
FS	Male	.252	51	.000	.887	51	.000
	Female	.212	45	.000	.905	45	.001
DRBPS	Male	.213	51	.000	.842	51	.000
	Female	.281	45	.000	.801	45	.000
RDNI	Male	.279	51	.000	.872	51	.000
	Female	.252	45	.000	.844	45	.000
SCD	Male	.293	51	.000	.839	51	.000
	Female	.257	45	.000	.789	45	.000
IITOA	Male	.253	51	.000	.825	51	.000
	Female	.276	45	.000	.799	45	.000
CSR	Male	.212	51	.000	.869	51	.000
	Female	.244	45	.000	.791	45	.000
RCS	Male	.226	51	.000	.835	51	.000
	Female	.177	45	.001	.888	45	.000
RRI	Male	.229	51	.000	.895	51	.000
	Female	.209	45	.000	.859	45	.000

a. Lilliefors Significance Correction

Normal Q-Q Plots





APPENDIX 4

Levene Test for Equality of Variances

Test of Homogeneity of Variances

	. 55. 5. 1101	Levene Statistic	df1	df2	Sig.
SSCS	Based on Mean	1.331	1	94	.252
5505	Based on Median	1.390	1	94	.241
	Based on Median and with	1.390	1	93.907	.241
	adjusted df	1.000	·	00.001	
	Based on trimmed mean	1.278	1	94	.261
DF	Based on Mean	.454	1	94	.502
	Based on Median	.175	1	94	.677
	Based on Median and with	.175	1	80.445	.677
	adjusted df				
	Based on trimmed mean	.397	1	94	.530
FS	Based on Mean	.045	1	94	.833
	Based on Median	.012	1	94	.912
	Based on Median and with	.012	1	93.996	.912
	adjusted df				
	Based on trimmed mean	.050	1	94	.824
DRBPS	Based on Mean	2.135	1	94	.147
	Based on Median	2.467	1	94	.120
	Based on Median and with	2.467	1	93.869	.120
	adjusted df				
	Based on trimmed mean	2.345	1	94	.129
RDNI	Based on Mean	.033	1	94	.857
	Based on Median	.162	1	94	.688
	Based on Median and with	.162	1	81.747	.688
	adjusted df				
	Based on trimmed mean	.063	1	94	.803
SCD	Based on Mean	.014	1	94	.905
	Based on Median	.195	1	94	.660
	Based on Median and with	.195	1	93.889	.660
	adjusted df				
	Based on trimmed mean	.141	1	94	.708
IITOA	Based on Mean	.312	1	94	.578
	Based on Median	.302	1	94	.584
	Based on Median and with adjusted df	.302	1	90.332	.584

CSR	Based on Mean	3.412	1	94	.068
	Based on Median	1.564	1	94	.214
	Based on Median and with	1.564	1	75.789	.215
	adjusted df				
	Based on trimmed mean	2.964	1	94	.088
RCS	Based on Mean	1.159	1	94	.284
	Based on Median	1.236	1	94	.269
	Based on Median and with	1.236	1	89.182	.269
	adjusted df				
	Based on trimmed mean	1.328	1	94	.252
RRI	Based on Mean	.568	1	94	.453
	Based on Median	.282	1	94	.596
	Based on Median and with	.282	1	93.058	.596
	adjusted df				
	Based on trimmed mean	.423	1	94	.517