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Doctoral Dissertation

**The Impact of Sales Promotions on Consumer Buying Behaviour: A Comparative
Analysis from the Pandemic to the Post-Pandemic Period**

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1. Introduction

Sales promotion has become one of the most widely used instruments within the marketing mix for influencing consumer buying behaviour in increasingly competitive marketplace environments. Promotional activities such as price discounts, bundling, loyalty card, Buy One Get One Free (BOGO), coupon or voucher, and free trial are commonly utilized to stimulate demand by increasing the perceived value associated with a purchase (Kotler & Keller, 2016). These promotional mechanisms are designed to encourage product trial, accelerate purchase timing, and shape consumer acquisition patterns across different retail environments. Previous studies demonstrate that sales promotions significantly influence consumer perceptions of value, purchase intentions, and decision making processes across various product categories and distribution channels (Chang, 2017; Haudi et al., 2022; Sinha & Verma, 2020). Consequently, understanding how consumers respond to promotional stimuli remains a central concern within marketing and consumer behaviour research.

Existing literature further suggests that different promotional formats influence consumer buying behaviour in different ways. Monetary incentives such as price discounts and coupons primarily enhance perceived economic value and encourage purchasing decisions, particularly among price sensitive consumers (Jee, 2021; Sinha & Verma, 2020). Other promotional mechanisms, including bundling strategies and Buy One Get One Free (BOGO) offers, influence acquisition behaviour by increasing perceived quantity advantages and improving value evaluations associated with transactions (Kotler & Keller, 2016). In contrast, relationship-oriented promotional tools such as loyalty programs and free trials contribute to stronger brand attitudes and repeated purchasing behaviour. However, previous research also indicates that intensive promotional activity may alter the way consumers evaluate marketing incentives over time, potentially increasing price sensitivity or weakening perceived product value in the long term (Hawaladar et al., 2019; Kuntner & Teichert, 2016). These findings indicate that the impact of promotional mechanisms on consumer behaviour is not uniform and may vary depending on broader economic conditions, market environments, and behavioural responses.

Consumer buying behaviour refers to the processes and purchasing decisions consumers demonstrate when responding to sales promotion activities and promotional incentives (Kotler & Keller, 2016). Within the context of this study, consumer buying behaviour is examined through behavioural dimensions including sensitivity to promotional frequency, promotional exposure, and impulse purchasing. Consumer buying behaviour is important in this study because sales promotions may influence consumers' purchasing decisions, responsiveness

toward promotional deals, and overall reactions to promotional incentives (Pólya et al., 2024; Veselovská, 2025; Zhang et al., 2026). *Sensitivity to promotional frequency* refers to the extent to which repeated promotional offers and promotion types such as price discounts, bundling, Buy One Get One Free (BOGO), loyalty deals, coupons or vouchers, and free trials influence consumers' responsiveness and purchasing decisions over time (Jaravel & O'Connell, 2020). This dimension is important because the continuous use of different promotion types may influence how consumers evaluate and respond to promotional offers. *Promotional exposure* refers to the degree to which consumers encounter promotional stimuli through sales promotion techniques. This dimension is important because increased exposure to promotional activities may influence consumers' purchasing decisions and responsiveness toward promotional incentives (Sinha & Verma, 2020). *Impulse purchasing* refers to spontaneous and unplanned purchasing behaviour triggered by promotional stimuli, urgency, and perceived value rather than deliberate decision-making processes (Feng et al., 2024). The relationship between promotional exposure and impulse purchasing is important because greater exposure to promotional activities may increase consumers' tendency toward spontaneous purchasing decisions. Therefore, this study investigates how the relationship between promotional exposure and impulse purchasing evolves in response to consumers' exposure to sales promotional activities.

The importance of understanding promotional effectiveness became particularly significant during the COVID-19 pandemic. The COVID-19 pandemic refers to the global outbreak of coronavirus disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which generated widespread health, social, and economic disruptions across countries and markets worldwide (World Health Organization, 2019). The pandemic introduced a major disruption affecting consumption practices, economic stability, and purchasing decisions worldwide. Studies examining pandemic-related consumption patterns indicate that crisis conditions significantly influenced consumer risk perception, spending priorities, and evaluations of product value (Sheth, 2020). Empirical research reports substantial changes in shopping practices during this period, including the rapid expansion of digital retail channels, adjustments in product preferences, and a stronger emphasis on value-oriented consumption (Braholli, 2022; Wahyuningsih et al., 2022; Wen & Liu-Lastres, 2022). Beyond these short-term behavioural shifts, the pandemic also challenged established assumptions regarding consumer behaviour and purchasing decision making. According to Sheth (2020), large-scale disruptions such as COVID-19 may fundamentally alter how consumers evaluate risk, price,

and promotional value in uncertain environments. These developments highlighted the need to re-examine the effectiveness of promotional strategies during periods characterized by economic disruption and subsequent recovery.

The post-pandemic period refers to the phase after the acute stage of a pandemic when the spread of disease becomes controlled and societies transition from emergency response toward long-term management of economic, social, and structural consequences (Diogo Gonçalves et al., 2025). This period is generally characterized by the lifting of restrictive measures, normalization of social and economic activities, and continued management of residual impacts associated with the crisis. For the purposes of this research, the post-pandemic period is formally associated with the conclusion of the global health emergency declared by the World Health Organization on May 5, 2023 (World Health Organization, 2023). However, the transition toward post-pandemic market conditions began earlier as restrictions were gradually removed and consumer activities increasingly normalized across many countries. These developments created important questions regarding whether consumer responses to promotional incentives observed during the pandemic period persisted, weakened, or transformed within post-pandemic marketplace environments.

Within this evolving environment, promotional strategies became increasingly important because consumers assessed purchasing opportunities more carefully through the lens of perceived financial benefits and value propositions. Research indicates that promotional offers can strongly influence acquisition decisions by enhancing utilitarian and economic value perceptions associated with a purchase (Jee, 2021; Sinha & Verma, 2020). Nevertheless, the effectiveness of promotional incentives may also depend on broader behavioural dynamics such as perceived promotional attractiveness, exposure to repeated offers, and purchasing tendencies such as impulse buying (Hanaysha, 2018; Santini et al., 2015a). Previous studies suggest that repeated promotional exposure may influence how consumers interpret the credibility and attractiveness of marketing offers, while highly visible promotions may stimulate impulsive purchasing behaviour through perceptions of urgency and enhanced value (Cao et al., 2018; Jee, 2021). Examining these behavioural mechanisms is therefore essential for understanding how promotional stimuli interact with consumer decision making processes from the pandemic to the post-pandemic period.

Another important dimension of consumer behaviour research concerns the role of cultural and market contexts in shaping responses to marketing activities. Cultural norms, market institutions, and economic environments influence how consumers evaluate promotional offers

and interpret value propositions (Shahriar Ansari Chaharsoughi, 2012). Recent studies examining pandemic-related consumption patterns further highlight the importance of country-specific contexts when analyzing changes in consumer behaviour and purchasing decisions (Buraczyńska et al., 2022; Gębski, 2021; Rahmanov et al., 2022). Within this perspective, the present dissertation examines consumer responses to sales promotions in Azerbaijan and Poland in order to explore how promotional incentives and consumer purchasing behaviour evolved from the pandemic to the post-pandemic period.

In response to these developments, this dissertation investigates the influence of sales promotions on consumer buying behaviour from the COVID-19 pandemic to the post-pandemic period. The research focuses on several widely implemented promotional strategies, including price discounts, bundling, loyalty card, Buy One Get One Free (BOGO), coupon or voucher, and free trial. In addition to examining the effectiveness of these promotional mechanisms, the study also considers broader behavioural dimensions associated with promotional responsiveness, including promotional attractiveness, sensitivity to promotional frequency, and impulse purchasing behaviour. Through this approach, the dissertation seeks to provide a broader understanding of how consumer responses to promotional incentives evolved across changing marketplace conditions and how these dynamics relate to consumer buying behaviour.

1.1 The Research Gaps

Although sales promotion and consumer buying behaviour have been extensively examined in marketing literature, several important theoretical, methodological, and contextual gaps remain. Existing research has provided valuable insights into the effects of promotional strategies on consumer decision making, including the role of monetary and non-monetary incentives, perceived value, and purchase intentions (Ailawadi & Neslin, 1998; Sinha & Verma, 2020; Haudi et al., 2022). In parallel, a growing body of literature has investigated changes in consumer behaviour during the COVID 19 pandemic, highlighting shifts in purchasing priorities, increased price sensitivity, and the expansion of digital consumption patterns (Sheth, 2020; Burlea-Schiopoiu et al., 2022; Chopdar et al., 2022).

However, despite these contributions, the intersection between sales promotion effectiveness and consumer behaviour across the pandemic and post-pandemic periods remains insufficiently developed. Much of the existing research focuses either on the general effectiveness of promotional tools or on behavioural changes during crisis conditions, with limited integration of these two perspectives. As a result, there is still a lack of comprehensive understanding of

how promotional strategies influence consumer behaviour over time, particularly in relation to the transition from crisis driven consumption to more stabilized market conditions.

A key limitation in the literature concerns the temporal dimension of consumer behaviour. While numerous studies have documented behavioural changes during the pandemic period (Bareja-Wawryszak et al., 2022; Grzywińska-Rapca, 2022; Sheth, 2020), relatively few have examined whether these changes persist, diminish, or transform in the post-pandemic environment. This creates uncertainty regarding the long term effectiveness of promotional strategies, as it remains unclear whether consumers continue to exhibit heightened sensitivity to promotional incentives or revert to pre-pandemic purchasing patterns. Addressing this temporal gap is essential for understanding how marketing strategies should be adapted in evolving economic environments. In addition, limited research has examined how the frequency of sales promotions shapes consumer responses over time, particularly whether repeated exposure continues to influence purchasing behaviour or leads to reduced responsiveness. Furthermore, the relationship between exposure to sales promotions and impulse purchasing behaviour remains insufficiently explored, especially in terms of how this relationship changes between the pandemic and post-pandemic periods.

In addition to the temporal limitation, the literature demonstrates a strong methodological imbalance. Existing studies have predominantly relied on either qualitative approaches, focusing on consumer perceptions and experiences (Amornpinyo, 2022; Cheah & Aigbogun, 2022; Hawaldar et al., 2019), or quantitative methods emphasizing statistical relationships between promotional variables and purchasing outcomes (Eleboda, 2017; Haudi et al., 2022; Sinha & Verma, 2020). While both approaches provide valuable insights, the limited integration of qualitative and quantitative perspectives restricts a comprehensive understanding of the mechanisms underlying consumer responses to promotional strategies. The absence of mixed-method research designs that capture both behavioural patterns and underlying motivations represents a significant gap in the literature.

Another important gap relates to the specificity of promotional mechanisms. Although prior research has examined the general effects of sales promotions, there is limited comparative evidence on how different types of promotional tools influence consumer behaviour across changing economic conditions. Studies often focus on single promotional instruments or aggregate promotional effects, without systematically comparing distinct mechanisms such as price discounts, bundling offers, buy one get one free promotions, coupons, loyalty programs, and free trials within a unified analytical framework (Sinha & Verma, 2020; Tong et al., 2022).

This limits the ability to understand how different promotional formats vary in effectiveness and how their influence evolves over time.

Furthermore, the literature remains largely concentrated on single country analyses, with limited cross-cultural comparative research examining consumer responses to promotional strategies. Consumer behaviour is shaped by cultural norms, economic conditions, and market structures, which influence how individuals perceive value and respond to marketing incentives (Shahriar Ansari Chaharsoughi, 2012). However, comparative studies between markets with different levels of economic development and retail maturity remain underrepresented. In particular, there is a lack of research examining consumer responses to sales promotions in both developed European markets and emerging economies within the same analytical framework.

This gap is particularly relevant in the context of Poland and Azerbaijan, which represent contrasting economic and retail environments. Poland, as a mature European Union market, is characterized by a highly developed retail sector and established promotional practices, while Azerbaijan represents an emerging economy with evolving consumption patterns and retail structures (Buraczyńska et al., 2022; Gębski, 2021; Rahmanov et al., 2022). Despite these differences, limited research has examined how consumers in these two contexts respond to promotional incentives, particularly in relation to changes observed during and after the COVID 19 pandemic.

Finally, there is a lack of integrated research examining behavioural mechanisms associated with promotional effectiveness, such as promotional attractiveness, sensitivity to promotional frequency, and the relationship between promotional exposure and impulse purchasing. While individual studies have explored these factors separately (Hanaysha, 2018; Santini et al., 2015; Cao et al., 2018; Jee, 2021), there is limited research that combines these dimensions within a single analytical framework. This limits the ability to understand how different behavioural factors interact to shape consumer responses to promotional strategies.

In response to the identified gaps, this dissertation adopts an integrated research approach that addresses key limitations in existing literature. By examining multiple promotional mechanisms, including price discounts, bundling, loyalty card, Buy One, Get One Free (BOGO), coupon or voucher and free trial, the study overcomes the focus on single promotional tools. The inclusion of both pandemic and post-pandemic periods addresses the limited research on the effects of the pandemic on consumer behaviour and the persistence of these effects in the post-pandemic period by analyzing how consumer responses evolve over time. The use of

a mixed-method design responds to methodological limitations by combining quantitative and qualitative insights. Additionally, the study incorporates behavioural dimensions such as promotional attractiveness, sensitivity to promotional frequency, and impulse purchasing, which are often examined separately in prior research. Finally, the comparative analysis between Poland and Azerbaijan contributes to addressing the lack of cross-cultural evidence in markets with different levels of economic development.

1.2 Research Problems

The COVID 19 pandemic significantly changed how consumers think and behave, especially in relation to value, spending, and promotional offers. As Sheth (2020) explains, crisis conditions reshape consumer priorities and consumption patterns, while Buraczyńska et al. (2022), Helisz et al. (2021), and Kusz et al. (2023) similarly show that purchasing behaviour was affected across different markets. Retailers in many countries, including Azerbaijan and Poland, used various sales promotion techniques to keep consumers engaged and maintain sales during the crisis. As markets moved into the post-pandemic period, consumer attitudes toward promotions appeared to shift, as also indicated by Buraczyńska et al. (2022), Kusz et al. (2023) and Merlo (2023), yet the direction and strength of these changes remain unclear. This creates a research problem, as there is limited understanding of how different promotional tools influence consumer behaviour across product categories and whether these effects differ between cultural and market contexts such as Azerbaijan and Poland. It is also uncertain whether the changes observed during the pandemic are short-term adjustments or long-term habits that continue to shape purchasing decisions.

Another research problem relates the limited understanding of how consumer perceptions and behaviours towards sales promotions changed from the pandemic to the post-pandemic period. According to Amorpinio (2022) many consumers became more careful about spending and more focused on value for money during the pandemic. At the same time, Suciana and Syahputra (2023) highlight that retailers increased the use of discounts and promotional offers to stimulate purchases. However, it remains unclear how these experiences have influenced consumer perceptions of sales promotions after the pandemic. For example, consumers may have become more dependent on promotional incentives, or alternatively more selective and skeptical in evaluating them. There is also limited evidence explaining whether these changes represent temporary reactions or long-term behavioural transformations.

Next research problem relates to the lack of clarity about how the effectiveness of different types of sales promotions has changed. Retailers used various promotion tools during the

pandemic, including price discounts, coupons, loyalty programs, bundling, and buy one get one free offers. As shown by Cao et al. (2018) and Yi and Jeon (2003), different promotional mechanisms influence purchasing behaviour in different ways depending on perceived value and context, while Nie et al. (2024) also emphasize variation across promotional formats. However, most existing studies focus on individual tools rather than comparing multiple promotional strategies over time. As a result, it is still unclear which types of promotional deals remain effective in the post-pandemic period.

A further research problem concerns unclear changes in consumers' sensitivity to the frequency of promotional offers. During the pandemic, consumers were frequently exposed to discounts and campaigns as retailers attempted to maintain demand. Research by Hanaysha (2018), as well as Hawaldar et al. (2019) and Santini et al. (2015), suggests that repeated exposure to promotions can reduce their effectiveness and lead to consumer fatigue. However, it is not clear whether consumers in the post-pandemic period have become more sensitive to promotional frequency or whether frequent promotions have become a normal part of purchasing behaviour.

Another research problem is the lack of understanding of how promotional exposure influences impulse buying behaviour. Impulse buying, defined as spontaneous and unplanned purchasing, increased during the pandemic due to changes in consumption patterns and increased online shopping. Cao et al. (2018) and Jee (2021) show that promotional incentives such as discounts and limited-time offers can trigger such behaviour by increasing perceived value and urgency. However, as argued by Sheth (2020), consumers may become more cautious in their decision making after a crisis. This creates a research problem, as it remains unclear whether the relationship between promotional exposure and impulse buying has changed in the post-pandemic environment.

Final research problem concerns the limited cross-cultural understanding of consumer preferences for different types of promotional deals. As Shahriar Ansari Chaharsoughi (2012) explains, consumer behaviour is shaped by cultural norms, economic conditions, and market structures. Existing studies have examined consumer behaviour during the pandemic in Poland (Buraczyńska et al., 2022; Gębski, 2021; Kusz et al., 2023) and in Azerbaijan (Rahmanov et al., 2022; Hasanova et al., 2023; Quliyev, 2021), but comparative research remains limited. According to (World Bank, 2024) data, Poland maintained relatively stable final consumption expenditure during the pandemic and post-pandemic period, remaining at approximately 76 percent of GDP in 2020 and fluctuating only slightly between 75 and 78 percent from 2021 to 2024. In contrast, Azerbaijan showed significantly higher volatility, with consumption

increasing to around 77 percent in 2020 due to a contraction in GDP, followed by a sharp decline to approximately 66 percent in 2021 and 55 percent in 2022, before gradually recovering toward 70 percent by 2024. These contrasting patterns highlight clear differences in economic stability and consumption dynamics between the two countries during and after the pandemic. Such differences suggest that consumers in more stable markets may respond differently to promotional incentives compared to those in more volatile economic environments. However, there is limited empirical evidence explaining how these differences influence consumer preferences for specific types of promotional deals.

1.3 Research Objectives

The following research objectives are central to the study and provide the foundation for achieving the overall purpose of the research. They guide the investigation of sales promotions and consumer buying behaviour across the pandemic and post-pandemic periods.

1. Examine the changes in consumer perception and behaviour towards sales promotions during the COVID-19 pandemic and explore how those changes manifest in the post-pandemic period. This objective aims to understand how consumer attitudes and behaviours towards sales promotions have evolved due to the pandemic and determine whether these changes are persistent or transient as society moves towards a post-pandemic era. This objective relates to the temporal dimension of consumer behaviour. Existing research has mainly focused on changes during the pandemic, with limited evidence on whether these changes persist in the post-pandemic period.

2. Determine changes in the effectiveness of different types of sales promotions during and after the pandemic - this objective seeks to identify which types of promotional deals (e.g., price discounts, bundling, loyalty card, Buy One, Get One Free (BOGO), coupon or voucher and free trial deals) have experienced notable shifts in their influence on consumer purchasing behaviour. The analysis will highlight how consumer responses to each promotional type evolved from the pandemic to the post-pandemic period. The findings will help businesses optimize promotional strategies and adapt marketing resources to align with post-pandemic consumer preferences. This objective relates to the promotional mechanisms gap. Existing studies mainly examine individual types of sales promotions, with limited comparison of different promotional tools.

3. Assess changes in consumers' sensitivity to promotional frequency between the pandemic and post-pandemic periods - this objective seeks to evaluate whether consumers have become

more or less sensitive to the frequency of promotional offers over time. By comparing attitudes during and after the pandemic, the study will determine if constant exposure to discounts and campaigns continues to influence shopping decisions or if promotion fatigue has emerged. The insights will help retailers design more balanced and effective promotional schedules that align with evolving consumer attention and tolerance levels. This objective relates to the temporal dimension of consumer behaviour. It focuses on how the frequency of sales promotions shapes consumer responses over time, particularly whether repeated exposure continues to influence purchasing behaviour or leads to reduced responsiveness.

4. Analyze the evolution of the relationship between promotional exposure and impulse purchasing behaviour - this objective aims to determine how the connection between consumers' exposure to sales promotions and their tendency toward impulsive buying has changed from the pandemic to the post-pandemic period. It will identify whether promotional stimuli that once triggered spontaneous purchases have weakened or strengthened in their psychological impact. The analysis will provide guidance on how marketers can refine promotional communication to encourage purchase decisions without oversaturating or desensitizing consumers. This objective relates to the temporal dimension of consumer behaviour. It examines how the relationship between exposure to sales promotions and impulse purchasing behaviour changes between the pandemic and post-pandemic periods.

5. To identify differences between Azerbaijani and Polish consumers in their preferred types of promotional deals across various product categories - this aim investigates how cultural and market factors influence consumers' preferences for promotion types such as price discounts, bundling, loyalty card, Buy One, Get One Free (BOGO), coupon or voucher and free trial. It will determine whether each nationality associates certain promotions with specific product categories (e.g., daily goods vs. luxury items). The insights will help businesses localize promotional strategies to align with the cultural and economic realities of each market. This objective relates to the gap concerning cross-cultural comparative research. There is limited evidence on how consumers in different countries evaluate and prefer different types of sales promotions.

6. To compare Azerbaijani and Polish consumers in terms of their behavioural responses to sales promotions during and after the pandemic period - this aim seeks to uncover cross-cultural differences in how consumers from both countries react to promotional offers under changing market conditions. It will highlight whether one group remains more deal-driven or exhibits stronger behavioural adjustments over time. The findings will offer insights into how cultural,

economic, and contextual factors shape promotional responsiveness in different national markets. This objective relates to the gap concerning cross-cultural comparative research. Comparative studies across countries with different economic and cultural conditions remain underrepresented.

1.4 Research Questions

The research aims to answer the following research questions:

1. To what extent did consumers' evaluations of the attractiveness of sales promotions differ between the pandemic and post-pandemic periods?
 - a) To what extent did consumers' evaluations of the attractiveness of price discount deals differ between the pandemic and post-pandemic periods?
 - b) To what extent did consumers' evaluations of the attractiveness of product bundling deals differ between the pandemic and post-pandemic periods?
 - c) To what extent did consumers' evaluations of the attractiveness of Buy One Get One Free deals differ between the pandemic and post-pandemic periods?
 - d) To what extent did consumers' evaluations of the attractiveness of coupon or voucher deals differ between the pandemic and post-pandemic periods?
 - e) To what extent did consumers' evaluations of the attractiveness of loyalty deals differ between the pandemic and post-pandemic periods?
 - f) To what extent did consumers' evaluations of the attractiveness of free trial or demo deals differ between the pandemic and post-pandemic periods?
2. How do changes in the perceived attractiveness of promotional deals relate to changes in consumer behavioural tendencies from the pandemic to the post-pandemic period?
3. To what extent did consumers' sensitivity to promotional frequency change between the pandemic and post-pandemic periods?
4. How did the relationship between promotional exposure and impulse purchasing evolve from the pandemic to the post-pandemic period?
5. To what extent do Azerbaijani and Polish consumers differ in their behavioural responses to promotions from the pandemic to the post-pandemic period?
6. How do Azerbaijani and Polish consumers differ in their preferred types of promotional deals across product categories?

The selection of the six core sales promotion deals: Price Discount, Bundling, Buy One Get One Free (BOGO), Coupon or Voucher, Loyalty card, and Free Trial or Demo deal, is rigorously grounded in established marketing theory and their documented influence during the

COVID-19 crisis and its aftermath. These six instruments were chosen due to their collective capacity to capture the four primary strategic dimensions of promotional value that retailers utilized to modulate consumer behaviour amid significant economic and social disruption.

1. Direct Monetary Savings and Price Utility

Promotional instruments offering immediate, tangible financial benefits are critical for addressing the elevated price sensitivity and economic uncertainty characteristic of crisis periods (Purcărea et al., 2022a)

Price Discount and Coupon or Voucher Deal represent the most direct mechanisms for monetary reduction, furnishing consumers with clear, quantifiable utilitarian value and immediate financial alleviation (Sinha & Verma, 2020) This factor is especially salient within economically volatile markets, such as Azerbaijan, where consumers frequently prioritize instantaneous savings as a coping strategy for income uncertainty (Huseynzade, S. 2024)

2. Volume and Quantity Maximization

During periods characterized by supply chain volatility or mandatory confinement measures, consumer behaviour often shifts towards increased volume procurement and stockpiling, primarily driven by anticipatory anxiety regarding scarcity (Sheth, 2020)

Buy One Get One Free (BOGO) and Bundling directly capitalize on this behavioural shift by augmenting the perceived utility of purchase volume. BOGO offers a potent quantity-based incentive, while Bundling delivers product synergy or convenience at a reduced unit cost. Both are highly effective in stimulating larger transaction sizes during periods of market ambiguity.

3. Long-Term Relationship Building and Retention

Post-crisis recovery necessitates strategic efforts to retain customers whose habits were altered. Promotions, therefore, serve a dual function: immediate sales stimulus and sustained relational development

Loyalty Deal (e.g., reward accrual, exclusive member pricing) fundamentally reorients the consumer focus from a singular transaction to a continuous brand relationship. They are highly relevant for evaluating the enduring persistence of new purchasing habits and are posited to exhibit greater efficacy in stable, mature retail environments, such as Poland, where long-term customer value is typically emphasized (Yi & Jeon, 2003)

4. Risk Reduction and Product Trial

The pandemic catalyzed the accelerated adoption of new consumption methods, digital platforms, and delivery modalities (Wen & Liu-Lastres, 2022). Consumer inertia against switching or trying new offerings is most effectively mitigated by reducing perceived risk.

Free Trial or Demo Deal is specifically designed to perform this function. It lowers the psychological and financial threshold for experimentation, thereby facilitating transitions to new services (e.g., digital subscriptions) or previously unfamiliar product categories, a common adjustment when daily life was geographically constrained (Morales, 2021)

By meticulously examining these six promotional deals across the contrasting market contexts of Azerbaijan and Poland, this research ensures a comprehensive analysis of how diverse promotional appeals, ranging from immediate financial benefit to enduring customer loyalty, evolved in their efficacy following the global disruption.

1.5 Hypothesis

The study is guided by the following hypotheses:

H1: Consumers' evaluations of the attractiveness of sales promotions differed significantly between the pandemic and post-pandemic periods.

- H1a: Consumers' evaluations of the attractiveness of *price discount* deals differed significantly between the pandemic and post-pandemic periods.
- H1b: Consumers' evaluations of the attractiveness of product *bundling* deals differed significantly between the pandemic and post-pandemic periods.
- H1c: Consumers' evaluations of the attractiveness of *Buy One Get One Free* deals differed significantly between the pandemic and post-pandemic periods.
- H1d: Consumers' evaluations of the attractiveness of *coupon or voucher* deals differed significantly between the pandemic and post-pandemic periods.
- H1e: Consumers' evaluations of the attractiveness of *loyalty* deals differed significantly between the pandemic and post-pandemic periods.
- H1f: Consumers' evaluations of the attractiveness of *free trial or demo* deals differed significantly between the pandemic and post-pandemic periods.

H2: Changes in the perceived attractiveness of promotional deals from the pandemic to the post-pandemic period are positively associated with changes in consumers' promotional buying behaviours (e.g., impulse purchasing, stockpiling, or product experimentation).

H3: Consumers' sensitivity to the frequency of promotions has decreased in the post-pandemic period compared to the pandemic period.

H4: The positive relationship between promotional exposure and impulse purchasing was stronger during the pandemic than in the post-pandemic period.

H5: Cross-cultural factors significantly influence the nature and intensity of consumer behavioural responses to promotional offers across the pandemic and post-pandemic periods.

- H5a: There is a significant difference between Azerbaijani and Polish consumers in their behavioural responses to promotional offers during and after the pandemic.
- H5b: Azerbaijani consumers demonstrate stronger behavioural responsiveness to promotional deals (e.g., higher impulse purchasing and stockpiling) than Polish consumers during both periods.

H6: Azerbaijani and Polish consumers differ significantly in their preferences for specific types of promotional deals across various product categories.

- H6a: There is a significant difference between Azerbaijani and Polish consumers in their preferred promotional deal types (e.g., discounts, coupons, loyalty programs, bundling).
- H6b: Azerbaijani consumers show a stronger preference for volume and quantity maximization promotions (Buy One Get One Free and Product Bundling) than Polish consumers.

2. Sales Promotion: Theoretical Foundations, Promotional Techniques, and Consumer Responses

This chapter presents a review of the existing literature related to sales promotion and consumer buying behaviour. The discussion covers the conceptual understanding of sales promotion, major consumer-oriented promotional techniques, and the broader dimensions associated with promotional activities within contemporary markets. In addition, the chapter examines various perspectives from previous academic studies concerning consumer perceptions, behavioural responses, and promotional effectiveness across different contexts and industries.

2.1 Reviewing Previous Researchers' Contributions: Definitions, insights and key findings in sales promotion

Sales promotion plays a crucial role in marketing campaigns, incorporating a diverse array of incentive tools, predominantly of short-term nature, aimed at stimulating consumer or trade engagement and driving increased trial, accelerated purchase, or greater adoption of specific products or services. According to various authors, sales promotion has been defined from diverse perspectives in a scholarly manner. As stated by Kotler and Keller (2016), “*Sales promotion, a key ingredient in many marketing campaigns, consists of a diverse collection of incentive tools, mostly short term, designed to stimulate trial, or quicker or greater purchase, of particular products or services by consumers or the trade*”. Meanwhile, American Marketing Association (AMA) define the sales promotion as “*Promotion marketing includes tactics that encourage short-term purchase, influence trail and quantity of purchase, and are very measurable in volume, share and profit.*”

Figure 1: Distinctive benefits of sales promotion



Source: Kotler, 2016

The figure 1 generated based on the books of Marketing Management by Kotler and Keller (2016). The figure represents the sales-promotion tools encompass a wide range of strategies,

such as coupons, contests, and premiums. Sales-promotion tools offer three fundamental benefits: communication, incentive, and invitation. These advantages work synergistically to capture consumers' attention, motivate them to purchase, and drive immediate action.

Sales-promotion tools are designed to effectively grab attention and deliver impactful messages to consumers. Through eye-catching visuals, compelling slogans, and persuasive information, these tools create a memorable impression and generate interest in the promoted product. By highlighting key features, benefits, or unique selling points, they aim to influence consumer perceptions and encourage product consideration.

Sales promotion is a marketing technique that uses a variety of incentive measures to drive consumer purchase, encourage resellers and salespeople, and enhance short-term sales for certain items or services (Kotler & Keller, 2016). These incentive solutions adhere to psychological motivation rules, utilizing advantages and incentives to impact customer decision-making. Sales promotion promotes a sense of reciprocity by providing added value or inducements, motivating consumers to return perceived value through sales (Pride et al., 2017)

The use of short-term rewards in sales promotion capitalizes on the ideas of scarcity and need, instilling in consumers a sense of urgency to take benefit from limited-time offers (Armstrong et al., 2017). According to the (American Marketing Association, 2007), promotion marketing is results-oriented, concentrating on influencing short-term buys, trial, and buy amount, with quantifiable outcomes such as volume, market share, and profit. **Table 1** presents a selection of widely cited academic definitions of sales promotion from leading marketing scholars and institutions across different years.

Table 1: Definitions of sales promotion

Authors	Year	Definition
Philip Kotler, Kevin Lane Keller	2016	"Sales promotion consists of a diverse collection of incentive tools, mostly short-term, designed to stimulate quicker or greater purchase of particular products or services by consumers or the trade."

William M. Pride, O.C. Ferrell	2018	"Sales promotion is an activity or material that acts as a direct inducement, offering added value or incentive for the product to resellers, salespeople, or consumers.
Gary Armstrong, Philip Kotler	2017	"Short-term incentives to encourage the purchase or sale of a product or a service."
America Marketing Association	2007	" Promotion marketing includes tactics that encourage short-term purchase, influence trail and quantity of purchase, and are very measurable in volume, share and profit."
Roger A. Kerin, Steven W. Hartley, William Rudelius	2018	"Sales promotion - a short-term inducement of value offered to arouse interest in buying a product or service."
Jerome McCarthy, William D. Perreault Jr.	2021	"Sales promotion refers to those marketing activities other than personal selling, advertising, and public relations that stimulate consumer purchasing and dealer effectiveness."

Source: Author's elaboration

A strategic understanding of consumer behaviour and targeted rewards customized to individual audiences are required for effective sales promotion (Kerin & Hartley, 2018). Furthermore, it is a crucial part of the marketing mix, working in tandem with personal selling, public relations and advertising to improve customer buying habits and dealer effectiveness (Perreault Jr et al., 2021). Marketers can successfully achieve marketing objectives through implementing scientific ideas and utilizing an effective strategy (Kotler & Keller, 2016).

Furthermore, sales-promotion tools incorporate concessions or inducements that provide additional value for consumers. This added value can come in various forms, such as exclusive discounts, limited time offers, free samples, or loyalty rewards. By offering these incentives, sales promotions create a sense of advantageous opportunity, prompting consumers to perceive greater value in making a purchase. The perceived benefit of obtaining a deal or receiving extra rewards serves as a powerful motivator, increasing the likelihood of conversion.

Moreover, sales-promotion tools explicitly invite consumers to take immediate action. They create a sense of urgency or a call-to-action, encouraging consumers to engage in the transaction promptly. This invitation aspect is often achieved through phrases like "act now," "limited time only," or "while supplies last," compelling consumers to seize the opportunity without delay. By leveraging the psychological principle of scarcity, sales promotions tap into consumers' fear of missing out (FOMO) and elicit a sense of urgency, ultimately driving immediate purchase behaviour. The conventional approach in evaluating the contribution of different promotion tools to product performance has centered on the direct effects. This pertains to examining how a promotion influences the attitudes, beliefs, and actions of individuals who are exposed to it. This perspective has been widely studied and forms a crucial aspect of research exploring the impact of promotional strategies on product performance (Whan Park et al., 1988).

Sales promotion strategies are particularly effective in achieving short-term goals, such as boosting sales volume, clearing excess inventory, or generating buzz around a new product launch. By emphasizing product offers and creating a sense of exclusivity or time sensitivity, these promotions stimulate immediate consumer response and facilitate quick sales. For example, competition stands out as a frequently used sales promotion technique among retailers due to its ability to elicit an immediate response from consumers. A previous study conducted by Sue and Ken (1993) supports the notion that competitions possess significant influence over both companies and consumers, manifesting in their rapid spread and capturing of attention.

In subsequent sections of this chapter, we will delve into a more comprehensive exploration of sales promotion. We will examine various types of sales-promotion tools, their strategic implementation, and their impact on consumer behaviour. By understanding the intricacies of sales promotion, marketers can effectively leverage these tools to optimize sales outcomes and cultivate long-term customer loyalty.

In accordance with the research conducted by Pauwels et al.'s (2002), promotional effects can be categorized into two groups based on the time frame and type of purchase behaviour. The

time frame aspect is further elucidated through the identification of three effects: immediate effects, adjustment effects, and permanent effects. Immediate effects pertain to the short-term alterations in sales that occur concurrently with price promotions. Adjustment effects, on the other hand, encompass the transitional period between the initial short-term response and the subsequent attainment of equilibrium, which may manifest as either mean reversion or the establishment of a new sales level. Lastly, permanent effects of a marketing action necessitate the perpetuation of a portion of the event's impact, thereby instigating a new trend.

According to Kuntner & Teichert's (2016) findings imply that price promotion is a crucial and well-established scientific field that still holds considerable potential for further research. They found that in the long term, price promotions make customers more sensitive to prices, but they do not have a lasting impact on revenues or profits. Moreover, The empirical findings derived from Park et al.'s (2009) research strongly support the significance of price promotions as a pivotal factor influencing consumers' perceived value within the online apparel shopping context. Specifically, the provision of a promotion code was observed to engender more favorable perceptions of product value compared to instances where such a code was not made available. These results can be generalized to posit that promotional offers, such as discount codes, exert a positive impact on consumers' perceived value across various product categories and diverse online shopping scenarios. The study underscores the paramount importance of comprehending the dynamic nature of price promotions and their consequential effects on consumer behaviour, thereby offering fruitful opportunities for future research endeavors in this domain. According to Huff et al.'s (1999) study on brand managers' response to sales promotions, it was found that they exhibited a higher preference for trade and consumer sales promotions compared to media advertising. Price-oriented promotions, especially coupons, were favored more than non-price promotions. However, brand managers appeared to underestimate consumer interest in non-price promotions, suggesting a potential underutilization of these strategies. Moreover, promotional campaigns significantly impact net sales of businesses. Heavy household category promotions increase total non-promotional sales, while textile promotions depress them. Carryover effects are limited, indicating a short-term response. Perishable promotions negatively affect long-term sales. Freo (2005) analyze the promotions based on grocery, perishables, textile, light household and heavy household categories. And according to his findings, heavy household product category promotions positively impact net sales, while textile product category promotions have a negative effect.

Promotions show short-term effects on net sales, with perishable product category promotions leading to cannibalization of regular purchases.

According to one of the most cited study by Ailawadi & Neslin (1998) on the impact of promotions on category demand, researchers developed a model that incorporated a flexible usage rate mechanism. The study compared this model with the existing approach and found that the flexible functions provided a better fit. The findings demonstrated the ability of the flexible usage rate functions to capture changing consumption patterns in both the yogurt and ketchup categories. The study also highlighted the discriminant validity by showing that the less flexible ketchup category had different usage rate parameters compared to the more flexible yogurt category. Furthermore, the study by them utilized Monte Carlo simulation to quantify the effect of promotions on consumption, revealing that a substantial portion of the short-term sales increase during promotions in the yogurt category was attributed to increased category consumption. Moreover, Simpson (2006) came to conclusion by using qualitative analysis that trust and the sharing of objectives play a vital role in effectively utilizing sales promotions in the supermarket retail setting. To maximize the efficiency and effectiveness of chosen techniques, channel members can employ relationship marketing strategies. This approach enables all members, even those with limited power, to have a greater opportunity to develop sales promotion programs that benefit them, instead of being subjected to promotions dictated by more powerful members.

Another interesting research by Silva-Risso et al., (1999) introduces a decision support system for consumer product manufacturers to enhance the effectiveness of trade promotion programs. He found that it includes a consumer response model to measure true incremental sales during promotions, accounting for brand switching. He introduces a novel decision support framework that amalgamates a consumer response model and an optimization module, aimed at optimizing trade promotion strategies for consumer product manufacturers. Empirical results indicate that embracing the model's suggested promotion calendar yields a substantial enhancement in brand profitability without detrimental effects on market share, thereby offering advantageous outcomes for both the brand and the retailer. From other hand, Subramanian (2016) found that innovative service satisfaction exhibits a robust correlation with customer promotion behaviour. From a marketing standpoint, his study underscores the importance of factoring in the budget hotel's location and image to effectively engage customers in brand promotion. Also, Sterling (2008) make a systematic literature review regarding sales promotion of nutrigenomic. The study found that a wide variety of organizations were involved in online sales promotion

of nutrigenomic tests, often lacking adequate information and caveats, with healthcare service providers being the primary promoters, and the need for regulatory oversight highlighted due to inconsistent and potentially misleading information.

As indicated by the research outcomes, it was determined that disparities in sales performance among various product families could be attributed to specific factors. Consequently, it was advised to avoid utilizing uniform promotional strategies for differing product families in order to optimize sales strategies (Ramanathan & Muyldermans, 2010). Another study by Ramanathan (2012), examined the influence of internal (type of promotion, display feature, cannibalization) and external factors (competitions, holidays) on promotional sales accuracy through regression analysis. Results reveal that higher internal factor influence leads to better forecast accuracy, while a dominant presence of external factors hampers accuracy. The study suggests varying degrees of collaboration in supply chains based on internal factors, emphasizing the importance of accurate information sharing for effective promotional planning. From other hand, according to Barton and Behe (2017), the passage underscores two key insights in sales promotion within the green industry retail sector. First, Point-of-Sale (POS) materials are heavily favored, constituting majority of promotional methods. Second, a significant amount of retailers, especially larger ones, employ Customer Loyalty Programs (CLPs), highlighting their impactful role in enhancing promotional efforts.

Yoon Kin Tong conducted a research regarding examining the buying intentions of female shoppers in mall retail shoe stores through the lens of Belk's model. The study's main findings recommend strategies for retail owners, including pre-first day sales promotion, showcasing diverse shoe designs, creating a captivating store atmosphere with suitable music and lighting, incorporating wall mirrors for perceived spaciousness, and employing a combination of monetary and non-monetary promotions to cater to budget constraints. The research underscores the importance of adapting to evolving consumer behaviour to maintain competitive advantage and long-term profitability (Yoon Kin Tong et al., 2012). Moreover, Whan Park (1988) introduced four step promotion development and evaluation model that offers a structured four-step methodology aimed at enhancing the accountability of promotional efforts in marketing. It commences with the acquisition of baseline data on market characteristics, enabling subsequent promotion activities to be measured effectively. Subsequently, a tailored communication strategy is developed to facilitate positive information dissemination within the distribution network. By addressing areas of weakness and capitalizing on direct and indirect communication and sales-facilitating effects, the strategy

seeks to optimize promotional tools. The model then advocates for the assessment of campaign effectiveness through post-promotion tracking studies, thereby informing strategic adjustments based on achieved objectives. Overall, the approach underscores the importance of consistent monitoring and adaptable strategies to either maintain or intensify efforts, ensuring optimal communication and heightened market performance. This model's insights hold significance for marketing practitioners seeking to bolster the efficacy of their promotional campaigns (Whan Park et al., 1988). Also, the research by Trapero et al., (2013) highlights that moderate expert adjustments to forecasts during promotions can lead to reduced errors, challenging initial assumptions. Additionally, the study suggests that mathematical models for predicting promotional sales offer benefits in terms of efficiency and accuracy, though challenges in variable selection and implementation complexity need further exploration.

Another interesting by Trapero & Pedregal (2016), which investigated the dynamic bullwhip effect metric to examine the impact of promotional campaigns on supply chain dynamics. In contrast to conventional assumptions, the research uncovers that the bullwhip effect diminishes during promotional periods. This outcome challenges the established belief that promotions trigger heightened bullwhip effects, instead aligning with recent findings proposing that fluctuating pricing strategies could mitigate demand variability.

The findings of the research by Swait & Erdem (2002) indicated that the impact of temporal consistency in sales promotions and product availability on consumer product evaluations and choices was thoroughly investigated. The study revealed that both feature and availability consistency were found to augment systematic consumer utility, while the influence of price inconsistency on utility was more intricate. The research demonstrated that price variability exhibited the potential to amplify systematic utility; however, it could also lead to a reduction in utility scale, particularly in scenarios of heightened predictability. While no adverse effect on systematic utility was observed due to display inconsistency, it was highlighted that the most pronounced inconsistencies in brand-related display activities correlated with diminished utility scale. In sum, the study ultimately suggested that incongruities in sales promotion mix and availability could exert a detrimental impact on consumer utilities and preferences, thereby underscoring the pivotal necessity for the judicious management of marketing mix elements.

2.2 Review of Consumer-Oriented Sales Promotion Techniques

This section examines the methods of sales promotion and their role in influencing consumer purchasing behaviour within contemporary markets. The discussion introduces both consumer-oriented and trade-oriented promotional techniques used by businesses to stimulate sales,

increase customer engagement, and strengthen market presence. Particular attention is given to consumer sales promotion techniques, as this research adopts a consumer-oriented perspective in examining promotional effectiveness and consumer buying behaviour. The section therefore focuses on major consumer sales promotion techniques, including price discounts, bundling offers, loyalty programs, Buy One Get One Free (BOGO) promotions, coupons or vouchers, and free trials or demos, which form the core promotional mechanisms analyzed in this study.

Consumer sales promotion method

Consumer sales promotion techniques aim to incentivize customers to either shop at certain retail stores or test specific products. Employing online methods for sales promotion can lead to enhanced product and brand retention. Retailers often utilize these techniques to draw customers to particular outlets, while manufacturers predominantly employ them to introduce novel products or boost the visibility of existing brands. The subsequent segment covers a range of approaches, including price discounts, bundling, loyalty card, buy one, get one free (BOGO), coupon or voucher and free trial.

Price Discounts

Price discounts are among the most widely used promotional strategies, aimed at reducing financial barriers and enhancing perceived value. During the COVID-19 pandemic, price discounts became a key driver for sustaining consumer engagement, particularly in regions experiencing economic uncertainty. Tran (2021) highlighted their role in Vietnam, where price-sensitive consumers were drawn to discounted goods. Similarly, Jee (2021) reported that discounts on essentials not only boosted immediate sales but also maintained brand loyalty during lockdowns. According to Lv et al., (2020), the findings indicate that on less reputable e-commerce platforms, the primary incentive for making purchases is the price discount.

However, excessive discounts can lead to adverse outcomes, as noted by Cao et al. (2018), who found that steep discounts on daily-deal platforms often created skepticism about product quality. Despite this, price discounts remain a fundamental tool for attracting new customers, as seen in Kapetanios et al. (2022), where discounts sustained consumer activity in Poland's grocery and household sectors.

The effectiveness of price discounts lies in their ability to increase consumer affordability, making products more accessible to a broader audience. They also drive immediate purchases, particularly during economic uncertainty, by lowering financial barriers and encouraging quick decision-making. Furthermore, strategic discounts on essential goods have been shown to foster

brand loyalty, as consumers are more likely to return to brands that offer value during critical times.

Bundling Offers

Bundling offers, where multiple products are sold together at a reduced price, are effective for increasing perceived value and encouraging bulk purchases. This approach gained significant traction during the pandemic as grocery retailers adapted to consumer stockpiling behaviours. Sinha and Verma (2020) showed that bundling strategies for utilitarian products not only increased sales but also motivated consumers to try new items when combined with familiar ones.

In the Polish grocery market, Kapetanios et al. (2022) noted that bundling offers for food and cleaning supplies encouraged consumers to make larger purchases during lockdowns. Hawaldar et al. (2019) demonstrated that bundling complementary goods, such as coffee machines and coffee pods, boosted short-term sales while fostering long-term loyalty.

Bundling enhances the perceived value of a purchase by offering more for less, making it an attractive option for consumers. It also encourages bulk buying, particularly during periods of high demand or stockpiling. Additionally, bundling is highly effective in promoting new product adoption, as consumers are more likely to experiment with unfamiliar items when paired with trusted or popular products.

Buy One, Get One Free (BOGO)

Buy One, Get One Free (BOGO) promotions are highly effective in driving volume sales and enhancing consumer perception of value. By offering additional products at no extra cost, BOGO appeals to consumer psychology, creating a sense of gain. Hawaldar et al. (2019) highlighted the success of BOGO offers for low-cost, high-frequency items such as snacks and beverages, which encouraged repeat purchases and habitual buying.

Jee (2021) reported that BOGO deals were particularly impactful during peak shopping seasons, such as Black Friday. These promotions not only attracted larger crowds but also boosted consumer satisfaction, as customers perceived greater value in their purchases.

The effectiveness of BOGO promotions is rooted in their ability to increase sales volume by incentivizing bulk purchases. The sense of receiving “extra value” drives consumers to prioritize these deals over standard discounts. Furthermore, BOGO promotions encourage

repeat purchases by fostering habitual buying behaviour, particularly for low-cost items with high consumption rates.

Loyalty Programs

Loyalty programs are designed to build long-term relationships with consumers by rewarding their repeat purchases. These programs gained prominence during the pandemic as businesses sought to retain customers in increasingly competitive markets. Kapetanios (2022) demonstrated that online grocery platforms in Poland retained first-time shoppers by offering loyalty rewards for repeat purchases.

Jee (2021) reported that tiered loyalty programs introduced by food delivery platforms enhanced user retention by providing benefits such as free delivery and exclusive discounts. Personalized incentives, as highlighted by Hawaldar et al. (2019), further strengthened loyalty, with a 15% increase in repeat purchases over six months.

The effectiveness of loyalty programs lies in their ability to enhance customer retention by incentivizing repeat purchases. They also increase the lifetime value of customers, as consistent rewards encourage stronger brand loyalty and recurring purchases. Moreover, loyalty programs differentiate brands in competitive markets, providing a unique advantage that fosters long-term consumer engagement.

Coupon

Coupons are popular tools in consumer sales promotion, lowering product prices to encourage customers to try products, increase sales, attract repeat buyers, and introduce new features. They deduct savings from the purchase price and are commonly used. Marketers generally acknowledge that coupons are a valuable promotional strategy for achieving immediate boosts in sales and attracting fresh customers. However, they remain uncertain about the lasting impact of coupon promotions on encouraging repeat purchases (Myung et al., 2007). Because some consumers struggle to find relevant coupons. Digital coupons via websites and apps are gaining popularity. Platforms like Groupon drive consumers to seek deals. Retailers frequently send coupons via mail, but their prevalence might lead to dependency. Traditional coupon clipping remains popular despite digital trends.

Companies find couponing profitable, increasing distribution before major holidays. Digital marketing aids couponing resurgence. Digital platforms offer print and digital coupons, combining grocery coupons, cashback, and digital codes. Coupons must be recognizable and

clear. Product nature guides coupon setup. Paper coupons are found in packages, inserts, print ads, receipts, and mail. Electronic coupons are online, in-store, or at checkout.

According to Neslin & Shoemaker (1983), despite the significant role coupon promotions play in marketing, their interactions with numerous large companies indicate that many managers lack effective means of calculating the comprehensive profitability of a potential coupon promotion campaign. Confronted with the intricacies of coupon-related choices, managers frequently prioritize examining intermediate factors like redemption rates, factory shipments, and the direct expenses associated with coupon programs instead.

Coupons benefit by boosting brand awareness, rewarding current users, luring back former users, and prompting larger purchases. They provide insights into market reach. Electronic coupons excel due to lower costs, better targeting, data collection, and experimentation. In the competitive landscape, stores redeem rival coupons and enhance their offerings to attract customers.

Free trial or demo

Free trial or demo is a strategic tool employed by marketers to stimulate product trials, enhance initial sales, and establish favorable distribution channels for novel products (Pride et al., 2017). This method involves offering complimentary product portions to potential customers through diverse mediums like events, mail, online platforms, and in-store settings. Despite the associated costs of production and distribution, this remains a potent approach for sales promotion. Free trials effectively mitigate consumer reluctance towards trying new products and create the perception of valuable items received at no expense. The delivery preferences for free trials vary, encompassing options such as mailed distributions and in-store tastings. When designing free trials, it's important to consider factors such as seasonal demand, market attributes, and previous advertising endeavors. However, this strategy might not be suitable for products with slow market movement. Despite its financial implications, the adoption of free trial is on the rise, with a considerable number of consumer product companies integrating it into their overarching strategies.

Additionally, Moreover, H. Li et al., (2019) found in her research regarding optimal design of free samples for digital products and services that when high-quality free samples of digital content are provided, it tends to boost the sales of high-quality digital products and services. From other hand, Bawa & Shoemaker (2004) investigated the effect of free samples on brand sales. According to their findings, the impact of free sample promotions can differ substantially among various brands, including those belonging to the same product category. This variation can be attributed to factors like expansion effects (which broaden the customer base),

acceleration effects (which boost the purchase rate), and cannibalization effects (which can divert sales from existing customers).

Frequently-used incentives

According to Yi & Jeon (2003), Loyalty is defined as repeated purchases of particular products or services during a certain period of time. At a fundamental level, consumer loyalty can manifest towards various entities, encompassing brands, services, retail establishments, product categories (such as cigarettes), and even recreational pursuits (like swimming). It is important to distinguish the term "customer loyalty" from "brand loyalty" to underscore that loyalty is an attribute attributed to individuals rather than an inner quality of brands (Uncles et al., 2003).

In the business landscape, strategies to foster customer loyalty through frequent-user incentives have gained traction (O. C. Ferrell et al., 2020). These tactics involve offering loyalty cards or rewards programs, often seen in supermarkets or airlines. The concept is to entice customers into consistent purchases by providing them with advantages like discounts, points accumulation, or even free items. Notably, these incentives can sway consumer behaviour towards lesser-known brands, although their impact on strong and established brands remains limited. The core objective is to cultivate enduring customer allegiance, a strategy often favored by service-based enterprises like hotels, car rentals, and cafes. These initiatives not only express appreciation to loyal patrons but also yield valuable consumer insights that marketers employ to nurture robust and mutually beneficial customer relationships.

Premiums

Premium promotions can be viewed as non-monetary incentives since they enhance value without changing the quantity or price dynamics (Palazón & Delgado, 2009). Premiums refer to complimentary or low-cost items provided as incentives to encourage product purchases. These incentives serve to attract competitors' customers, introduce product variations, enhance promotional activities, and foster consumer loyalty (O. C. Ferrell et al., 2020). Unlike discounts, consumers often perceive premiums as receiving something for free, making them more appealing. The effectiveness of premiums hinges on their alignment with the intended audience and congruence with the brand's identity. The choice and desirability of the premium play a pivotal role in its success. These incentives can be incorporated within packaging, disseminated through retailers, or distributed via mail. Overall, premiums represent a strategic approach to engaging consumers, promoting products, and cultivating lasting brand connections.

Money refunds

Money refunds entail consumers furnishing proof of purchase and subsequently receiving a specified monetary sum through mail (Ferrel, 2020). Often, manufacturers stipulate multiple product acquisitions as a prerequisite for qualifying for such refunds. Marketers adopt money refunds as an alternative to coupons, aiming to invigorate sales. The primary objective behind money refunds is to promote the initial experimentation with a product, all while being a budget-conscious approach. However, their impact might be curtailed by a relatively subdued response rate, consequently confining their influence on sales (Ferrell, 2020).

Rebates

Rebates entail sending consumers a predetermined sum of money following a single product purchase, particularly on higher-priced items. These incentives are geared towards stimulating purchases, fostering brand loyalty, and driving product adoption. Typically, rebates are processed post-purchase through a mail-in procedure, though they can be instant for significant items like automobiles. According to , Qiang & Moorthy (2007), rebates and coupons function differently as price-discrimination devices due to their distinct redemption processes: coupons are redeemed with the purchase, while rebates are redeemed after the purchase.

Streamlining the process, some marketers facilitate online rebate applications. It's worth noting that negative consumer perceptions about rebates potentially tarnishing a product's reputation due to perceived quality or sales assumptions warrant careful consideration. Addressing these perceptions is vital for maintaining a positive product image and enticing consumer interest.

Flash Sales and Limited-Time Offers

Flash sales and limited-time offers create urgency by leveraging scarcity and time constraints. These promotions are particularly effective in e-commerce environments, where consumers are more likely to make impulsive purchases. Tran (2021) observed a 40% increase in flash sale participation during the pandemic in Vietnam, as lockdowns drove consumers to rely on online platforms.

Jee (2021) emphasized that time-sensitive promotions work best when paired with exclusivity, such as limited availability of high-demand items. Similarly, Kapetanios (2022) highlighted that these promotions were particularly effective for seasonal goods in Poland, where urgency-driven marketing spurred significant consumer engagement.

The effectiveness of flash sales and limited-time offers lies in their ability to encourage impulse buying. The urgency created by time constraints compels consumers to act quickly, making these promotions ideal for driving short-term sales. Additionally, they are effective in boosting

engagement on digital platforms and clearing seasonal or excess inventory while maintaining profitability.

Table 2 summarizes the sales promotion techniques adopted in this study, namely price discounts, bundling, Buy One Get One Free (BOGO), loyalty programs, coupons or vouchers, and free trials or demos.

Table 2: Summary of Promotion Types, Authors, and Findings

Type of Promotion	Authors	Key Findings
Price Discounts	Tran (2021), Jee (2021), Cao et al. (2018), Kapetanios (2022)	Critical for driving immediate sales; excessive discounts can create skepticism about quality.
Bundling Offers	Sinha & Verma (2020), Kapetanios (2022), Hawaldar et al. (2019)	Encouraged bulk buying and new product trials, particularly during stockpiling periods.
Buy One, Get One Free (BOGO)	Hawaldar et al. (2019), Jee (2021)	Increased volume sales; effective for low-cost, high-frequency items and peak shopping seasons.
Coupon or Voucher, Free Trial or Demo	Tran (2021), Jee (2021), Kapetanios (2022)	Boosted impulse buying and engagement; urgency-driven strategies cleared seasonal inventories.
Loyalty card	Kapetanios (2022), Jee (2021), Hawaldar et al. (2019)	Retained customers and fostered brand loyalty through personalized rewards and tiered benefits.

Source: Author's elaboration

The purpose of this table is to present a structured overview of the sales promotion techniques discussed within the existing literature and their influence on consumer purchasing behaviour. The table is important because it allows for a clearer understanding of how different promotional mechanisms are associated with distinct consumer behavioural responses across

various market contexts. Furthermore, it provides a conceptual foundation for the selection of the sales promotion techniques adopted in the present study.

Overall, the existing literature demonstrates that consumer-oriented sales promotion techniques play a significant role in shaping consumer purchasing behaviour across different retail and market environments. Previous studies indicate that promotional mechanisms influence consumers through different dimensions, including monetary savings, perceived value enhancement, quantity maximization, customer retention, and risk reduction. Although the literature discusses a wide variety of promotional tools, the present study focuses specifically on price discounts, bundling, Buy One Get One Free (BOGO), loyalty programs, coupons or vouchers, and free trials or demos due to their consistent relevance within previous research and their strong association with consumer behavioural responses. These promotional techniques are particularly important in understanding purchasing behaviour during periods characterized by economic uncertainty and changing consumption patterns, such as the COVID-19 pandemic and the post-pandemic period. Furthermore, the reviewed literature highlights that different promotional techniques influence consumer behaviour through distinct psychological and economic mechanisms, reinforcing the need for a comparative examination within the present study.

2.3 Consumer Perceptions and Behavioural Effects of Sales Promotions

This section examines the broader influence of sales promotions on consumer perceptions, emotional responses, brand-related outcomes, and purchasing behaviour across different market environments. Existing literature suggests that sales promotions extend beyond short-term sales stimulation and significantly contribute to perceived value creation, customer engagement, brand awareness, emotional attachment, and long-term consumer relationships. Accordingly, this section discusses the major behavioural and psychological dimensions associated with sales promotion effectiveness, including the benefits of sales promotions, their influence on brand knowledge and consumer perception, the role of emotions in promotional effectiveness, and the effectiveness of promotional strategies across different consumer industries.

2.3.1 Benefits of Sales Promotions

Sales promotions provide consumers with both utilitarian and hedonic benefits, making them one of the most influential components of contemporary marketing strategies. Previous researchers emphasize that promotional activities not only stimulate immediate purchases but also shape consumer perceptions regarding value, affordability, convenience, and shopping

satisfaction. According to Kotler and Keller (2016) sales promotions are designed to encourage quicker or greater purchase decisions through various incentive-based mechanisms that increase perceived consumer value. Similarly, Ferrelll (2020) argue that sales promotions create reciprocal value between firms and consumers by offering incentives that positively influence consumer decision-making processes.

One of the most significant advantages of sales promotions is their ability to provide direct monetary savings. Discounts, coupons, rebates, and bundled offers reduce financial barriers and enhance purchasing affordability, particularly during periods characterized by economic instability and uncertainty. Sinha and Verma (2020) state that consumers frequently perceive promotional discounts as opportunities to maximize purchasing power while minimizing financial risk. During the COVID-19 pandemic, these financial incentives became increasingly important as consumers exhibited greater price sensitivity and prioritized essential purchases (Kapetanios et al., 2022). Jee (2021) further observed that discounts on essential goods not only stimulated immediate purchasing behaviour but also contributed to maintaining customer loyalty during lockdown periods.

Beyond financial incentives, sales promotions also improve shopping convenience and accessibility. Promotional strategies such as digital coupons, free shipping offers, and time-sensitive deals simplify purchasing decisions and reduce consumer effort during the purchasing process. Tran (2021) highlighted that online promotional activities became increasingly effective during the pandemic due to the accelerated shift toward digital purchasing channels. Consequently, sales promotions contribute not only to economic value but also to convenience-oriented consumer satisfaction.

In addition to functional benefits, sales promotions generate experiential and emotional value that extends beyond purely economic incentives. Promotional events, contests, loyalty rewards, and exclusive campaigns create excitement and engagement among consumers, contributing to more enjoyable shopping experiences. Palazón and Delgado (2009) found that non-monetary incentives such as premiums frequently generate stronger emotional responses than direct price discounts because consumers perceive them as receiving additional value rather than merely spending less money. Furthermore, Ferrelll (2020) emphasized that loyalty rewards and premium-based incentives strengthen customer relationships by increasing repeated interaction between consumers and brands.

Sales promotions also influence perceptions regarding product quality and reliability. Through free trials, warranties, product demonstrations, and personalized incentives, businesses communicate confidence in product performance and customer satisfaction (Pham et al., 2025; Sim et al., 2024a). However, the literature also suggests that excessive promotional intensity may generate negative quality perceptions. Cao et al. (2018) observed that extremely steep discounts on daily-deal platforms occasionally created consumer skepticism regarding product quality and authenticity. Therefore, the effectiveness of promotional strategies depends significantly on the balance between perceived value creation and maintaining brand credibility.

2.3.2 Effect of Sales Promotions on Brand Knowledge and Consumer Perception

Sales promotions play an important role in shaping consumer perceptions of brands and strengthening brand-related knowledge within competitive market environments. Existing literature suggests that promotional activities function not only as transactional tools but also as communication mechanisms that influence how consumers interpret brand identity, product value, and organizational image (Kotler & Keller, 2016).

Consumer engagement with promotional campaigns often creates direct and memorable interactions with brands. Discounts, loyalty rewards, contests, coupons, and exclusive offers expose consumers to brand attributes and product-related information, increasing brand familiarity and recognition. Through repeated promotional exposure, consumers develop stronger awareness regarding product characteristics, pricing strategies, and overall brand positioning. Whan Park et al. (1988) argued that promotional campaigns significantly influence consumer attitudes and beliefs by reinforcing positive product perceptions and encouraging favorable behavioural responses.

Moreover, sales promotions contribute to brand differentiation by allowing organizations to communicate unique value propositions more effectively. In highly competitive industries, brands frequently use promotional strategies to distinguish themselves from competitors and strengthen their market positioning. For example, organizations emphasizing sustainability or social responsibility frequently integrate environmentally oriented promotional campaigns into their broader branding strategies to reinforce consumer perceptions regarding ethical business practices. Such alignment between promotional activities and brand values strengthens emotional attachment and enhances consumer trust.

The literature further indicates that promotional engagement deepens consumer-brand relationships through interactive participation. Promotional campaigns offering exclusive experiences, personalized rewards, or membership benefits encourage consumers to actively interact with brands. Shahriar Ansari Chaharsoughi (2012) highlighted that personalized and digitally targeted promotions significantly improve consumer engagement and purchase intentions within online retail environments. Similarly, Yi and Jeon (2003) emphasized that loyalty-oriented promotional mechanisms strengthen long-term consumer-brand relationships by encouraging repeated purchasing behaviour and continuous engagement.

Nevertheless, the effect of sales promotions on brand knowledge and perception may vary depending on promotional type and implementation strategy. While moderate promotional activities may enhance brand awareness and positive associations, excessive promotional dependency may reduce perceived exclusivity or weaken premium brand positioning. Consequently, businesses must strategically design promotional activities to support both immediate sales objectives and long-term brand equity development.

2.3.3 The Role of Emotions in Sales Promotions

Emotions play a central role in influencing consumer purchasing decisions, and sales promotions frequently operate through emotional and psychological mechanisms that shape behavioural responses. Existing literature demonstrates that consumers often respond emotionally to promotional activities, particularly when promotions create excitement, urgency, enjoyment, or perceived exclusivity.

Positive emotional responses such as satisfaction, excitement, and happiness are commonly associated with promotional offers that provide substantial value or exclusive rewards. Consumers frequently experience feelings of achievement and pleasure when obtaining products at discounted prices or receiving additional benefits through loyalty programs and bundled offers. Jee (2021) observed that promotional activities during major shopping events such as Black Friday generated heightened emotional engagement due to the combination of financial savings and competitive shopping environments.

At the same time, sales promotions also leverage negative emotional triggers, particularly fear of missing out (FOMO), urgency, and scarcity perceptions. Armstrong et al. (2017) argued that short-term promotional incentives capitalize on the psychological principles of scarcity and urgency, encouraging consumers to make rapid purchasing decisions. Flash sales and limited-time offers are particularly effective in creating immediate purchasing pressure by emphasizing

exclusivity and restricted availability. Tran (2021) reported that participation in flash sales increased substantially during the COVID-19 pandemic as consumers became increasingly responsive to urgency-driven promotional campaigns within digital retail environments.

Emotional influence is particularly visible within experiential and symbolic consumption contexts. Luxury brands frequently utilize exclusive promotional campaigns to reinforce feelings of prestige, belonging, and social status among consumers. Personalized rewards, invitation-only events, and limited-edition offerings strengthen emotional attachment by creating perceptions of exclusivity and uniqueness. Similarly, tourism and hospitality industries often design emotionally appealing promotional campaigns centered on safety, comfort, and memorable experiences, particularly during post-pandemic recovery periods (Haudi et al., 2022; Rončák et al., 2021).

Furthermore, sales promotions influence consumers' self-perception and identity-related motivations. Consumers often associate particular brands or promotional experiences with lifestyle aspirations, personal values, or social identity. Promotional campaigns aligned with sustainability, wellness, or ethical consumption trends therefore generate stronger emotional resonance because consumers perceive these activities as reflections of their own beliefs and preferences. Consequently, emotional appeals in sales promotions strengthen consumer-brand relationships and contribute significantly to long-term customer loyalty and retention.

2.3.4 Effectiveness of Sales Promotions Across Consumer Industries

The effectiveness of sales promotions varies substantially across industries due to differences in consumer expectations, purchasing patterns, market competition, and product characteristics. Existing literature demonstrates that organizations adapt promotional strategies according to sector-specific objectives and consumer behavioural patterns.

Within the retail and FMCG sectors, promotional activities are primarily designed to stimulate short-term sales, increase transaction volume, and encourage brand switching. Price discounts, BOGO offers, and bundling strategies are widely implemented to attract price-sensitive consumers and stimulate impulse purchasing behaviour. Hawaldar et al. (2019) found that bundling complementary products significantly increased short-term sales while encouraging repeated purchasing activity. Similarly, Kapetanios et al. (2022) observed that grocery retailers in Poland relied heavily on promotional campaigns during the pandemic to address stockpiling behaviour and maintain consumer activity under uncertain market conditions.

In e-commerce environments, digital transformation has significantly reshaped promotional effectiveness. Personalized recommendations, flash sales, digital coupons, and app-based loyalty programs enable firms to target consumers more efficiently and enhance customer engagement through real-time interactions. Shahriar Ansari Chaharsoughi (2012) emphasized that digital promotional channels significantly improve consumer trust and online purchasing intentions through personalized communication mechanisms. Tran (2021) further reported that urgency-driven promotional campaigns became highly effective during the pandemic due to the rapid transition toward online shopping channels.

The tourism and hospitality industry utilizes sales promotions differently by emphasizing experiential value and customer confidence-building. Promotional strategies frequently include discounted travel packages, flexible booking arrangements, complimentary services, and safety-focused incentives. Haudi et al. (2022) highlighted that safety-oriented promotional campaigns played a critical role in rebuilding consumer confidence within tourism markets during the pandemic period. Similarly, Rončák et al. (2021) found that promotional campaigns integrating health safety assurances with local tourism incentives were particularly effective in influencing post-pandemic travel behaviour.

In contrast, luxury brands apply promotional strategies more selectively to preserve brand prestige and exclusivity. Rather than relying heavily on direct price reductions, luxury firms frequently utilize personalized experiences, private consultations, and limited-edition offerings to maintain premium brand positioning. Sinha and Verma (2020) argued that experiential and value-added promotional strategies are more compatible with luxury consumer expectations because they reinforce exclusivity without damaging perceived product quality or brand image.

Overall, the literature demonstrates that the effectiveness of sales promotions depends on the interaction between promotional mechanisms, emotional responses, perceived value, industry characteristics, and consumer expectations. Consequently, promotional effectiveness should be evaluated not only through short-term sales outcomes but also through broader behavioural, emotional, and relational dimensions influencing long-term consumer engagement.

3. Systematic Literature Review on Sales Promotion and Consumer Buying Behaviour During and After the COVID-19 Pandemic

This chapter presents a systematic review of the existing literature on sales promotion and consumer buying behaviour, with a particular focus on changes observed during and after the COVID-19 pandemic. Given the fragmented nature of prior research, where studies often examine promotional effectiveness and consumer behaviour separately, a structured synthesis is necessary to provide a clearer and more integrated understanding of the topic.

The purpose of this review is to identify key findings, research trends, and gaps in the literature related to the impact of sales promotions on consumer behaviour. The chapter specifically examines the positive and negative effects of promotional strategies, pandemic-driven changes in purchasing behaviour, and the overall development of research in this field.

To ensure methodological rigor and transparency, the review follows a systematic approach based on clearly defined selection criteria and the PRISMA framework. This enables a comprehensive and unbiased evaluation of relevant studies, forming a solid foundation for the empirical analysis presented in subsequent chapters.

3.1. Systematic Literature Review Methodology

The rigorous process of identifying and selecting relevant literature for this systematic review was executed by strictly adhering to specific inclusion and exclusion criteria, thereby ensuring maximum relevance to the dissertation topic. This entire filtering process was meticulously documented using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) technique, which is visually represented in Figure 2: Application of PRISMA flow diagram.

Selection Criteria and Scope

The literature search initially targeted sources including articles, conference papers, book chapters, and reviews, and was restricted to the English language.

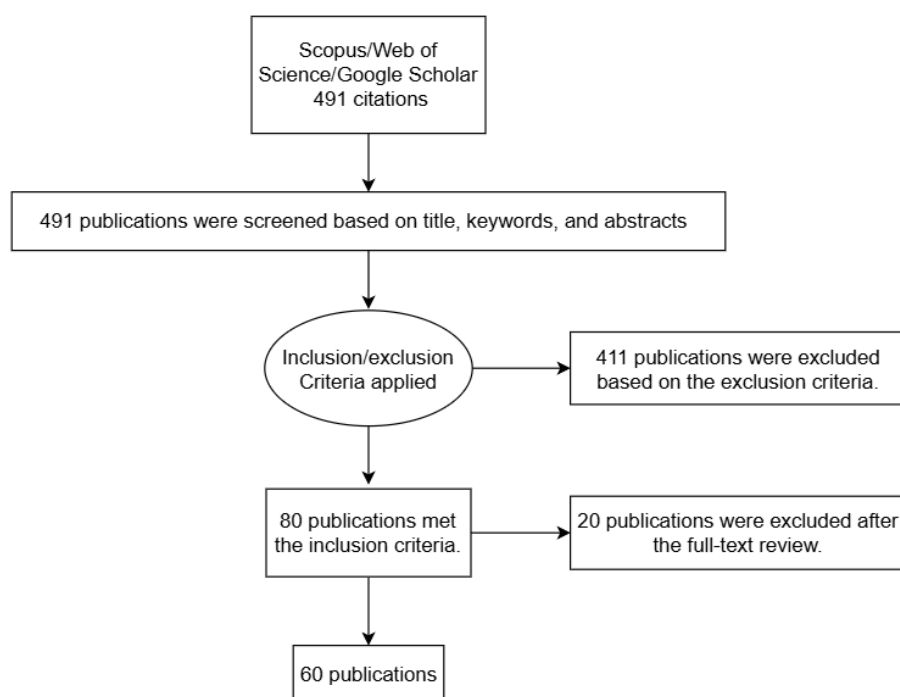
The inclusion criteria encompassed various topics related to the dissertation's focus: Sales promotions, pandemic, post-pandemic, and consumer buying behaviour. The subject areas of Business Management and Social Sciences have been selected to be included in the SLR. English-written articles published in scientific journals were included in the systematic literature review.

The Exclusion Criteria eliminated sources not directly relevant to the consumer focus: Trade sales promotion, advertising, and suppliers buying behaviour. Additionally, bachelor and master thesis, conference proceedings were excluded from the systematic literature review.

The systematic search was conducted across the following databases: Scopus, Web of Science, and Google Scholar.

The systematic literature review covers the period from 2012 to 2022. Defining a fixed time frame was necessary to ensure consistency and coherence in the review process. Although additional studies have been published after 2022, these were not included in the systematic dataset in order to maintain a stable analytical framework. However, more recent studies were considered in subsequent chapters of the dissertation to reflect ongoing developments in the field.

Figure 2: PRISMA screening flow chart.



Source: Author's elaboration

PRISMA Flow and Screening Process

The initial comprehensive search for relevant academic records was conducted using the keywords “sales promotion”, “consumer buying behaviour”, “pandemic”, and “post-pandemic”. The search was performed across three major scientific databases: Scopus, Web of Science, and Google Scholar.

This search yielded a total of 491 records. In the identification phase, duplicate records and clearly irrelevant studies were removed based on title and keyword relevance. This initial filtering process resulted in 80 records retained for the screening stage.

During the screening phase, the titles and abstracts of these 80 records were systematically reviewed in accordance with the predefined inclusion and exclusion criteria. As a result, 20 records were excluded due to lack of relevance to the research topic (e.g., focus on trade promotions, non-consumer contexts, or unrelated subject areas).

This process led to 60 full-text articles being assessed for eligibility. Following full-text evaluation, all 60 articles met the inclusion criteria and were therefore included in the final systematic literature review.

No additional records were identified through alternative sources such as websites, organizations, or citation tracking. Consequently, only database-derived studies were included in the PRISMA flow diagram to ensure clarity and methodological consistency.

3.2. The positive and negative impact of sales promotion on consumer behaviour

This section explores the impact of sales promotions on consumer behaviour, considering both positive and negative aspects. It examines how sales promotions can influence consumers in various ways, such as enhancing brand attitudes and purchase decisions, but also potentially causing discomfort or questioning brand quality. This chapter provides a comprehensive overview of the broad effects of sales promotions on consumer perceptions and behaviours, highlighting the nuanced nature of this marketing strategy.

3.2.1. The positive impact of sales promotion on consumer behaviour

Consumer behaviour is influenced by various elements, including the marketing mix. Sales promotion is one such element that marketers frequently use to influence consumer purchasing behaviour. Research has shown that sales promotion can act as a moderator of the effect of culture on consumer behaviour and can independently influence consumer behaviour (Shahriar Ansari Chaharsoughi, 2012). Studies have also found that sales promotion and perceived value have a significant impact on the purchase decisions of small market consumers (Haudi et al., 2022).

(Jee, 2021) found that the perception of utilitarian benefits (price-quality) has a positive impact on consumer purchase decisions (attitude and behavioural intention collectively). A study by (Sinha & Verma, 2020) also found that the relationship between monetary and non-monetary

sales promotions, hedonic benefits, utilitarian benefits, and consumer perceived value was positive and significant.

Moreover, Chang (2017) research highlights the significant impact of high consumer involvement and positive brand attitudes on purchase intention. Sales promotions can increase consumer involvement and enhance brand attitudes by creating a sense of partnership and belonging. To develop effective sales promotion strategies, it is important to consider these factors as key drivers of purchase intention, which can ultimately increase loyalty, purchase frequency, and positive word-of-mouth recommendations.

According to Suzuki's (2019) research, the path coefficient suggests that social value holds greater importance than safety and beneficial values in determining the effectiveness of sales promotions. This implies that sales promotions that emphasize social value can be more effective than those focusing on other values. As well as, in the case of alcohol industry, by making sure that their prices and promotional offers are competitive with those of higher strength alternatives, alcohol producers and sellers can stimulate the buy of lower strength alcohol beverages (Llopis et al., 2021). A minimum price per unit for selling alcohol is also advised, as it has recently been done in Scotland and Wales, so that governments can establish a legal framework that encourages the buy of lower strength products and lessens the prevalence of higher strength products on price promotion. The use of discounts is a popular strategy employed by merchants to increase sales in brick-and-mortar stores. With the widespread use of social media, this tactic is likely to have an even greater impact. To explore this effect, Lv et al., (2020) modified a specific formula by incorporating the discount factor, which allows for the simulation and calculation of purchase rates. The promotional deals can be effective in different product or service categories as well. According to the Berg et al., (2017) the prevalence of promotional tactics varies between on-premise alcohol outlets, such as bars and clubs, and off-premise tobacco and alcohol outlets, such as stores that sell these products for consumption off-premise. Daily or weekly deals, loyalty club memberships, and early bird or happy hour specials are more frequently observed in on-premise alcohol outlets. Moreover, to effectively persuade and impact the purchasing choices of consumers in the current competitive landscape, it is crucial to develop well-planned and transparent sales promotions that evoke trust and credibility (Eleboda, 2017). Bühne et al., (2015) found that the promotional strategies must align with the expectations of consumers.

The table 3 provides a summary of various studies related to sales promotion and consumer behaviour, highlighting the authors, publication years, methodologies employed, and key findings.

Table 3: Existing literature in positive effects of sales promotion

Authors	Year	Methodology(s)	Key Findings
Chaharsoughi et al.	2012	Conceptual model	Sales promotion moderates the effect of culture on consumer behaviour.
Haudi et al.	2022	QN using for PLS-SEM	Sales promotion and perceived value impact small market consumers' purchase decisions.
Jee T	2021	QN using for PLS-SEM	Utilitarian benefits positively influence consumer purchase decisions.
Sinha & Verma	2020	QN using for PLS-MGA	Monetary and non-monetary sales promotions, hedonic benefits, and utilitarian benefits have a significant impact on consumer perceived value.

Chang	2017	QN using for LISREL	High consumer involvement and positive brand attitudes increase purchase intention.
Suzuki	2019	QN using for MG-SEM	Social value in sales promotions is more important than safety and beneficial values.
Llopis et al.	2021	QN using for ARIMA	Competitive pricing and promotional offers for lower strength alcohol beverages stimulate their purchase.
lv et al.	2020	Data base using for EGM	Discounts, especially in the context of social media, impact purchase rates.
Berg et al.	2017	QN using for experimental design	On-premise alcohol outlets offer daily/weekly deals, loyalty club memberships, and early bird/happy hour specials.
Eleboda	2017	QN using for LRM	Well-planned and transparent sales promotions build trust and credibility.

Bühne et al.	2015	QN using for SBMM	Promotional strategies should align with consumer expectations.
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Note: QL: Qualitative Techniques (e.g., Case Studies, Observations, Interviews, Delphi technique), QN: Quantitative Techniques (e.g. survey questionnaires, panel data), PLS-SEM: Partial Least Square based Structural Equation Modelling, PLS-MGA - Partial Least Squares Multi-Group Analysis, LRM – Linear Regression Model, EGM - Evolutionary Game Model, MG-SEM - Multiple-Group Structural Equation Modeling, LISREL - Linear Structural Relations, ARIMA – Autoregressive Integrated Moving Average, SBMM - Scenario-based market models

Source: Author's elaboration

The scholars generally utilized quantitative research methodologies to investigate various aspects of consumer behaviour and the effects of sales promotions. These methodologies typically involved the collection of data through questionnaires, which are structured surveys designed to measure specific variables of interest. Questionnaires allow researchers to gather data from a large number of participants, providing a diverse range of responses.

These methodologies include conceptual models, questionnaire-based studies using techniques such as Partial Least Squares-Structural Equation Modeling (PLS-SEM), Linear Structural Relations (LISREL), Multiple Group Structural Equation Modeling (MG-SEM), Autoregressive Integrated Moving Average (ARIMA), and Linear Regression Models (LRM). Additionally, some studies utilize experimental design and database analysis. Overall, as it is obvious from table 3, majority of authors prefer to use quantitative data collection methods for analyzing their researches.

3.2.2. The negative impact of sales promotion on consumer behaviour

According to the research by Hawaldar et al., (2019), customers tend to perceive a product with a listed price of ₹100 (approx. 1.22\$) as being worth ₹81 (approx. 1\$) when it is sold at a discounted price. However, he mentioned that the impact of this discount on sales decreases when customers become aware of the actual original price. This indicates that using misleading discounts can influence customers to make purchases by deceiving them about the actual value of the product. These findings by him highlight the strong link between deceptive marketing

practices and consumer behaviour. Therefore, it is important for businesses to be transparent in their pricing to build trust and maintain a loyal customer base.

However, there are some researchers who think the sales promotions do not always have a positive effect on consumer buying behaviour. through a series of statistical analyses, it has been shown that providing discounts has an immediate negative impact on the sales of online daily deals (Cao et al., 2018) The research study by himself indicated that offering an additional 10% discount from the average of 55.6% could decrease sales by anywhere between 0.63% and 4.60%, equating to a reduction of 0.80 to 5.24 vouchers and a loss of revenue between \$42 to \$275.

According to (Hanaysha, 2018), the store environment plays a significant role in influencing consumers' behaviour and purchase decisions. However, sales promotions seem to have a negative impact on consumer purchase decisions. The finding was supported by Santini et al (2015), who claimed that excessive discounts cause consumers to feel uncomfortable, which ultimately results in the sense of caution previously mentioned and associates negatively with the hedonic features. Besides that, Simonson et al (1994) confirmed the negative effects of sales promotion on brands. He indicated that if consumers are unsure about the value of products and their own preferences, sales promotions and product features can be viewed as reasons not to purchase the advertised brands, making them open to criticism.

The table 4 provides a collection of findings from multiple studies that shed light on the potential drawbacks and negative impacts of sales promotions on consumer behaviour and brand perceptions by authors. These studies emphasize the risks associated with excessive discounts, highlighting how they can lead to perceptions of lower product value, negatively affect sales and revenue, influence consumer purchase decisions unfavorably, cause consumer discomfort, and even create negative views of promotions and brands when product value is uncertain.

The table 4 highlights key findings, methodologies and publication year from different authors regarding the negative effects of sales promotions.

Table 4: Existing literature in negative effects of sales promotion

Author(s)	Year	Methodology(s)	Key findings

Hawalдар et al.	2019	QN, QL using for DCM	Discounts can lead to perceptions of lower product value
Cao et al.	2018	QN using for REM, LRM	Excessive discounts can have a negative impact on sales and revenue
Hanaysha	2018	QN using for SEM	Sales promotions can negatively influence consumer purchase decisions
Santini et al.	2015	QN using for SEM	Excessive discounts can cause consumer discomfort
Simonson et al.	1994	QN using for MANOVA	Sales promotions and uncertain product value can lead to negative views of promotions and brands

Note: QL: Qualitative Techniques (e.g., Case Studies, Observations, Interviews, Delphi technique), QN: Quantitative Techniques (e.g. survey questionnaires, panel data), SEM - Structural Equation Modelling, LRM – Linear Regression Model, DCM - Discrete Choice Modeling, REM – Random Effect Model, MANOVA - Multivariate Analysis of Variance

Source: Author's elaboration

The authors utilized questionnaires as their primary data collection tool for analyzing the negative effect of sales promotion on consumer behaviour. Questionnaires are structured surveys that allow researchers to gather data from a large number of participants. They typically consist of a series of standardized questions designed to measure specific variables of interest. Questionnaires are an efficient way to collect data as they can be administered to a large sample

size, ensuring a diverse range of responses. The authors applied various statistical techniques to analyze the collected data. These techniques included regression models, such as linear regression model, to examine the relationship between variables. Additionally, the authors utilized structural equation modeling (SEM) to explore complex relationships among variables. SEM is a statistical technique that combines factor analysis and path analysis to assess the direct and indirect effects of variables on an outcome. It enables researchers to test theoretical models and examine the relationships between latent constructs, such as perceived product value or consumer discomfort. One of authors also employed multivariate analysis of variance (MANOVA) to investigate the effects of multiple independent variables on dependent variables simultaneously. MANOVA allows for the examination of differences between groups and the identification of significant effects on consumer perceptions.

Overall, the literature reviewed in this dissertation demonstrates that sales promotions have both positive and negative influences on consumer behaviour, depending on the nature of the promotional strategy and consumers' perceptions of value and credibility. On the positive side, studies by Chaharsoughi et al. (2012), Haudi et al. (2022), Jee (2021), and Sinha and Verma (2020) indicate that sales promotions positively influence purchase decisions by increasing perceived value, enhancing utilitarian and hedonic benefits, and strengthening consumer attitudes toward brands. Similarly, Chang (2017) emphasized that promotional activities can increase consumer involvement and purchase intention, while Eleboda (2017) and Böhne et al. (2015) highlighted the importance of transparent and consumer-oriented promotional strategies in building trust and credibility. These findings suggest that well-designed promotional campaigns can encourage purchasing behaviour, improve customer satisfaction, and strengthen brand relationships. In contrast, other researchers identified several negative consequences associated with sales promotions. Hawaldar et al. (2019) argued that misleading discounts may reduce perceived product value and damage consumer trust, whereas Cao et al. (2018) found that excessive discounting could negatively affect sales performance and profitability. Likewise, Hanaysha (2018), Santini et al. (2015), and Simonson et al. (1994) suggested that frequent or excessive promotions may create consumer discomfort, skepticism, and perceptions of lower brand quality, particularly when consumers are uncertain about product value. These studies indicate that sales promotions may not always generate favorable outcomes and can potentially weaken long-term brand image and consumer loyalty.

Therefore, the literature suggests that the effectiveness of sales promotions depends largely on how promotional strategies are implemented and perceived by consumers. While sales

promotions can stimulate purchasing behaviour and increase perceived value, excessive or misleading promotional practices may produce negative behavioural and attitudinal responses. Although previous scholars have extensively examined the influence of sales promotions on consumer behaviour, much of the existing literature focuses on specific promotional tools, individual markets, or limited time periods. In addition, previous studies often examine promotional attractiveness, impulse purchasing, promotional sensitivity, and consumer perceptions separately rather than within an integrated framework. Furthermore, limited attention has been given to comparing consumer responses across different cultural and economic environments, particularly in relation to the transition from the pandemic to the post-pandemic period. These gaps highlight the need for broader research examining multiple promotional mechanisms and behavioural dimensions within changing market conditions and across diverse national contexts.

3.3. Changes on purchasing behaviour of consumers in the pandemic

According to World Health Organization, the COVID-19 pandemic is a global outbreak of coronavirus, an infectious disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) virus.

The COVID-19 pandemic acted as a fundamental catalyst for structural changes in consumer behaviour, manifesting across four primary dimensions. Empirical evidence from the 2020–2021 period illustrates an unprecedented acceleration in the digital environment, as approximately 12% of EU enterprises either initiated or significantly intensified their online presence specifically due to the crisis (Eurostat, 2021).

This shift directly fueled the expansion of e-commerce, with its global share of total retail sales jumping from 16% in 2019 to 19% in 2020 (UNCTAD, 2021).

Parallel to these environmental changes, the adoption of digital payment methods saw significant growth; merchants utilizing contactless transaction technologies experienced an average 8.3% increase in sales volume during the 2020 lockdowns compared to those relying on traditional methods (World Bank, 2021). Furthermore, the psychological impact of the pandemic led to heightened volatility in purchasing patterns, specifically impulse buying. Systematic research conducted during the active pandemic phase indicates that roughly 40% of consumers increased their unplanned spending as a direct response to stress and perceived product scarcity (Pedro Mota Veiga & Julien Diogo, 2022).

3.3.1. Changes on purchasing behaviour of consumers in the pandemic: digital environment

The COVID-19 pandemic has had a significant impact on consumer behaviour, specifically in terms of purchasing decisions. Research has shown that consumers have not altered their behaviour to the same degree as before the pandemic, with various elements such as the marketing mix continuing to have an impact on purchasing behaviour (Purcărea et al., 2022b). One notable change in behaviour is an increase in online purchasing, as opposed to in-store purchasing (Heyns & Kilbourn, 2022). This shift in behaviour can be attributed to various factors such as fear of infection, government-imposed lockdowns and social distancing measures. According to Tran (2021), consumers are more likely to keep using the same service again if their practices, morals or beliefs are consistent with their behaviour when purchasing delivery food through applications. Moreover, the empirical findings by Burlea-Schiopoiu et al., (2022) show that the perceived risk of ordering food through Food Delivery Applications has a significant and direct effect on the consumer's buying behaviour during decision-making process in the pandemic. Thus, the relationship between consumer loyalty and visibility may be influenced by the consumer's perceived risks when purchasing food from either brick-and-mortar stores or digital platforms. The ease of use, service fees, payment security and offers or privileges provided by digital food delivery platforms have a significant impact on consumers' willingness to use them in the long term. This result can enable deliver app owners to make precise and reliable forecasts regarding potential trends and their impact (Jaroenwanit et al., 2022).

The pandemic has been noted as a factor that influences people's mental states, which in turn affects their mobile shopping habits. The effects of the crisis on consumers' attitudes and actions have been shown to result in increased dependence on smartphones and negative views, which ultimately impact the frequency of mobile shopping which is based on a study by Chopdar et al (2022). Moreover, according to Ababneh (2022), tourism businesses can improve their online visibility by regularly updating their website with an easy-to-use database, which can improve potential customers' mental health and encourage them to make buying decisions. This can also help to reduce any perceived risks of booking travel online. Tourism businesses must educate their employees about the importance of online marketing and actively track and respond to customer feedback through social media platforms. In terms of the impact of travel on their quality of life, consumers are becoming more aware of the positive effects of travel on their quality of life (Rončák et al., 2021). Also, the study by Li & McCrary (2022) found that

COVID-19 lockdowns and restrictions caused a state of reactance among consumers in both the US and Asia, leading to a desire to reassert their freedoms. The effect, however, was greater among US consumers. According to the study, it is critical for businesses to maintain agility and responsiveness to current events in order to effectively communicate with customers and maintain a positive image. According to the research by Alaimo et al (2022), online food vendors should prioritize the aspects of their services that have the greatest impact on consumer satisfaction. This is critical in keeping customers interested in using these platforms for online shopping.

Another study was discovered that the COVID-19 pandemic had the most consistent effect on consumer intentions to buy books online. The pandemic increased online book purchases, which were motivated by positive feelings rather than practical considerations. Hedonic reasons were found to have a greater influence on buying intentions than utilitarian reasons (Dincă & Dima, 2022). It is suggested that by prioritizing the improvement of these aspects, the likelihood of customers' continuance intention to use these tools to purchase products online can be increased. It has been noted that the enhancement of the usefulness of the service can positively influence the customer's intention to continue using these online tools.

Table 5: Existing literature in the changes on purchasing behaviour of consumers in the pandemic: digital environment

Authors	Year	Methodology(s)	Key Findings
Purcărea et al.	2022	QN, QL using for SEM	Consumers have not significantly altered their behaviour during the pandemic, and various elements of the marketing mix continue to impact purchasing behaviour.

Heyns & Kilbourn	2022	QN using for EFA	There has been an increase in online purchasing compared to in-store purchasing, driven by factors like fear of infection, lockdowns, and social distancing measures.
Tran	2021	QN using for SEM	Consumer loyalty towards food delivery applications is influenced by the alignment of practices, morals, or beliefs with their purchasing behaviour.
Burlea-Schiopoiu et al.	2022	QN using for SEM	Perceived risk associated with ordering food through Food Delivery Applications directly impacts consumers' buying behaviour during the decision-making process.
Jaroenwanit et al.	2022	QN using for CFA, PA, SEM	Ease of use, service fees, payment security, and offers provided by digital food delivery platforms significantly impact consumers' long-term willingness to use them.
Chopdar et al.	2022	QN using for PLS-SEM	The pandemic has led to increased dependence on smartphones and negative views, impacting the frequency of mobile shopping.

Ababneh	2022	QN using for StepReg, SReg	Regularly updating websites with an easy-to-use database can improve potential customers' mental health, reduce perceived risks, and enhance online visibility.
Rončák et al.	2021	QN using for MANOVA	Consumers are becoming more aware of the positive effects of travel on their quality of life.
Li & McCrary	2022	ADC using for RDA	COVID-19 lockdowns have led to a desire among consumers to reassert their freedoms, emphasizing the need for businesses to be agile and responsive.
Alaimo et al.	2022	QN using for NAM, POSET	Online food vendors should prioritize aspects of their services that have the greatest impact on consumer satisfaction to maintain customer interest.
Dincă & Dima	2022	QN using for EFA, BCA, MRA	The COVID-19 pandemic has increased online book purchases driven by positive feelings rather than practical considerations.

Note: QL: Qualitative Techniques (e.g., Case Studies, Observations, Interviews, Delphi technique), QN: Quantitative Techniques (e.g. survey questionnaires, panel data), ADC - Algorithmic Data Collection (e.g. machine learning), SEM - Structural Equation Modelling, PLS-SEM: Partial Least Square based Structural Equation Modelling, REM – Random Effect Model, MANOVA - Multivariate Analysis of Variance, EFA - Exploratory Factor Analysis,

CFA - Confirmatory Factor Analysis, PA -Path Analysis, StepReg – Stepwise Regression, SReg – Simple Regression, RDA - Regression Discontinuity Analysis, NAM - Non-aggregative Method, POSET - Partially ordered set, BCA - Bivariate Correlation Analysis, MRA - Multiple Regression Analysis.

Source: Author's elaboration

The table 5 which is provided above, includes various research studies conducted that focusing on changes on purchasing behaviour of consumers in the pandemic. The table represents the authors, publication year, methodologies and key findings of those studies. Essentially, the methodologies used in these studies primarily revolve around quantitative analysis, utilizing techniques such as survey-based questionnaires (QN) for analyzing exploratory factor analysis (EFA), confirmatory factor analysis (CFA), structural equation modeling (SEM), partial least squares-structural equation modeling (PLS-SEM), stepwise regression (StepReg), simple regression (SReg), multivariate analysis of variance (MANOVA), Non-aggregative Method (NAM), partial order set (POSET), and other statistical approaches. Moreover qualitative (QN) and algorithmic data collection (ADC) techniques are conducted for analyzing structural equation modeling (SEM) and regression discontinuity analysis (RDC).

3.3.2. Changes on purchasing behaviour of consumers in the pandemic: Payment method.

Another trend that has emerged during the pandemic is the increased use of mobile payment methods. With the technological development in the banking industry, consumers are now able to use various mobile payment methods such as virtual debit and credit cards (S. Y. Yu & Chen, 2022), mobile wallets, and QR code payments. This trend is likely due to the fear of infection, which has led to consumers avoiding physical contact with debit and credit cards. Additionally, people spend most of their time with their mobile devices for various reasons and mobile payment methods have become more popular as a result. (Heyns & Kilbourn, 2022) conducted research to understand the behavioural changes of consumers in relation to the way they consume products. The results of their research showed that consumers either did not change their behaviour to purchase products, or they increased purchasing on online shopping platforms. This trend towards online purchasing has been observed globally, with e-commerce sales growing exponentially during the pandemic (Amornpinyo, 2022). As online purchasing increased during the pandemic, it is also analyzed that consumers changed their behaviour in relation to the way of payment. Significantly, they prefer to use credit card payment (Buraczyńska et al., 2022), especially in cases of impulsive buying behaviour for fast fashion

products. This trend can be attributed to the convenience and ease of use of credit cards, as well as the increased security measures implemented by financial institutions to protect against fraud. Even with the restrictions and limitations implemented to avoid spreading during the pandemic, the use of credit and debit cards positively impacts impulsive purchasing habits for fashion products in physical stores (Gawior et al., 2022).

Table 6: Existing literature in the changes on purchasing behaviour of consumers in the pandemic: Payment Method

Authors	Year	Methodology(s)	Key Findings
Yu & Chen	2022	QN using for PLS-SEM	The use of mobile payment methods such as virtual debit and credit cards, mobile wallets, and QR code payments has increased during the pandemic due to the fear of infection and the convenience of mobile devices.
Amornpinyo	2022	QN, QL using for MWU and KW test	E-commerce sales have experienced significant growth globally during the pandemic, driven by the increased adoption of online purchasing by consumers.
Buraczyńska et al.	2022	QN using for χ^2 test	Consumers prefer using credit card payments, especially for impulsive buying behaviour of fast fashion products, during online purchasing. This preference can be attributed to convenience, ease of use, and increased security measures implemented by financial institutions.

Gawior et al.	2022	QN using for PLS-SEM	Despite restrictions and limitations during the pandemic, the use of credit and debit cards positively impacts impulsive purchasing habits for fashion products in physical stores, highlighting the continued importance of these payment methods even during challenging times.
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Note: QL: Qualitative Techniques (e.g., Case Studies, Observations, Interviews, Delphi technique), QN: Quantitative Techniques (e.g. survey questionnaires, panel data), PLS-SEM: Partial Least Square based Structural Equation Modelling, MWU – Mann Whitney U test, KW – Kruskal-Wallis test, χ^2 – Chi-squared.

Source: Author's elaboration

In the table 6, a research team conducted a comprehensive analysis using advanced Quantitative Techniques (QN) and employed Partial Least Square based Structural Equation Modelling (PLS-SEM) to explore the impact of various mobile payment methods. The study discovered a noteworthy rise in the adoption of virtual debit and credit cards, mobile wallets, and QR code payments during the pandemic, highlighting the convenience and safety associated with mobile devices. Moreover, another investigation utilized a combination of Quantitative Techniques (QN) and Qualitative Techniques (QL), including statistical tests like Mann Whitney U (MWU) and Kruskal-Wallis (KW). The study focused on e-commerce sales, revealing significant growth globally as consumers increasingly embraced online purchasing as a preferred method during the pandemic. Furthermore, a study employed Quantitative Techniques (QN) specifically through the application of the Chi-squared (χ^2) test to delve into consumer preferences in online purchasing. The findings emphasized a strong inclination towards credit card payments, particularly for impulsive buying behaviours observed in the fast fashion sector. This preference was attributed to the convenience, user-friendliness, and enhanced security measures implemented by financial institutions. Lastly, fourth research utilized Quantitative Techniques (QN) and PLS-SEM to examine the impact of credit and debit card usage on impulsive purchasing habits in physical stores during challenging times. Despite the restrictions, the study highlighted the continued importance of these payment methods, showcasing their positive influence on impulsive buying behaviours for fashion products.

In summary, these studies employed a combination of advanced quantitative and qualitative techniques, including surveys, statistical tests (MWU, KW, χ^2), and interviews, to comprehensively explore the relationship between payment methods and consumer behaviour in the context of the pandemic.

3.3.3. Changes on purchasing behaviour of consumers in the pandemic: E-commerce.

According to the findings of Braholli (2022), consumer behaviour has changed toward online buying, particularly during the closing of state and private economic sectors. Age has no effect on online grocery shopping, indicating that businesses should sell to all age groups. The Covid-19 has reinforced the increase in digital e-commerce, with the value of e-commerce businesses for food products increasing more than 500 times for every million infected people. The COVID-19 pandemic posed a critical challenge to the e-commerce sector, as panic purchasing, store closures, and an uncertain market situation created unexpected conditions (Pollák et al., 2022). Established players in the market with optimized internet infrastructure were capable of reacting rapidly, whereas those who have been hesitant to embrace digitalization had to quickly improvise in order to survive. Moreover, consumer ethnocentrism has a negative and not significant effect on consumer behaviour when it comes to making online purchases of goods and services. When potential markets assess the quality and effectiveness of global and local goods and choose the best one, these results are essential (Camacho et al., 2022).

The willingness of companies to take risks, the length of the pandemic, and the fear level to catch the virus all have negative and significant effects on the company's exit rate. Understanding for the need to exercise self-control, on the other hand, has a positive and significant impact on the business's capacity to survive (Okamuro et al., 2022).

There is another research which researched that younger generations are more likely than older generations to take part in e-commerce (Morales, 2021). Nonetheless, both age groups have increased their use of online retailing platforms, taking advantage of the many benefits such systems provide. Another findings by Gu et al., (2021), indicated the commitment of online shoppers to daily shopping. The pandemic thus stimulated online shoppers to show a constancy of buying behaviour. From another point of view, the increase in buying groceries online could be attributed to significant advertising investments made by digital grocery stores in response to the COVID-19 pandemic (Gruntkowski & Martinez, 2022).

Table 7 presents a summary of existing empirical studies examining changes in consumer purchasing behaviour related to e-commerce during the COVID-19 pandemic, outlining the authors, methodologies applied, and key findings.

Table 7: Existing literature in the changes on purchasing behaviour of consumers in the pandemic: E-commerce

Authors	Year	Methodology(s)	Key Findings
Braholli	2022	QN using for LRM	Consumer behaviour shifted to online buying during the pandemic, regardless of age, boosting e-commerce for food products.
Pollák et al.	2022	QN using for OLS regression	The COVID-19 pandemic presented challenges to the e-commerce sector, with panic purchasing, store closures, and market uncertainties.
Camacho et al.	2022	QN using for PLS-SEM	Consumer ethnocentrism doesn't significantly impact online purchasing behaviour.
Okamuro et al.	2022	QN using for Panel FE	Risk aversion, pandemic duration, and fear level negatively affect companies' e-commerce survival.

Morales M	2021	QN using for data interpretation	Younger generations are more likely to engage in e-commerce, but both age groups have increased their use of online retailing platforms during the pandemic.
Gu et al.	2021	QN using for correlation model	The pandemic has led online shoppers to exhibit consistent buying behaviour, indicating increased commitment to daily shopping through online platforms.
Gruntkowski & Martinez	2022	QN using for MRA	The increase in online grocery shopping can be attributed to significant advertising investments made by digital grocery stores in response to the COVID-19 pandemic.

Note: QN: Quantitative Techniques (e.g. survey questionnaires, panel data), PLS-SEM: Partial Least Square based Structural Equation Modelling, LRM – Linear Regression Model, MRA - Multiple Regression Analysis, OLS - Ordinary Least Squares regression model, FE – Fixed Estimation.

Source: Author's elaboration

Several studies have investigated the changes in purchasing behaviour of consumers during the pandemic, specifically focusing on impulse buying. Braholli (2022) employed quantitative techniques, specifically using a Linear Regression Model (LRM), to analyze the changes in consumer purchasing behaviour during the pandemic. The study found that consumer behaviour shifted to online buying, regardless of age, and this shift boosted e-commerce for food products. Pollák et al. (2022) utilized quantitative techniques, specifically employing Ordinary Least Squares (OLS) regression, to examine the challenges faced by the e-commerce sector during the COVID-19 pandemic. The study highlighted phenomena such as panic purchasing, store closures, and market uncertainties that affected consumer behaviour and the e-commerce sector.

Camacho et al. (2022) employed Partial Least Square based Structural Equation Modelling (PLS-SEM) to investigate the impact of consumer ethnocentrism on online purchasing behaviour during the pandemic. The study concluded that consumer ethnocentrism did not significantly influence online purchasing behaviour. Okamuro et al. (2022) utilized quantitative techniques, specifically employing Panel Fixed Estimation (FE), to explore the factors affecting companies' e-commerce survival during the pandemic. The study revealed that risk aversion, pandemic duration, and fear level had a negative impact on companies' ability to sustain their e-commerce operations. Morales M (2021), through quantitative techniques for collecting data and data interpretation method and he found that younger generations were more likely to engage in e-commerce, but both age groups increased their use of online retailing platforms during the pandemic. Gu et al. (2021), utilizing a correlation model, analyzed the changes in online shoppers' buying behaviour during the pandemic and found consistent buying behaviour among online shoppers, indicating increased commitment to daily shopping through online platforms. Grunkowski & Martinez (2022) employed Multiple Regression Analysis (MRA) to examine the increase in online grocery shopping during the pandemic, attributing it to significant advertising investments made by digital grocery stores in response to the COVID-19 pandemic.

3.3.4. Changes on purchasing behaviour of consumers in the pandemic: Impulse buying

Elisa (2022) found that the COVID-19 panic among Indonesian consumers resulted to a fear of a lack of supply of health supplement products and eventually ended influence impulsive buying behaviour. Furthermore, their findings suggest that external stimuli, such as scarcity, have a significant and beneficial impact on perceived value during the pandemic. Moreover, A significant increase was observed in the rate of dairy products purchased during the pandemic period and as a result of the pandemic, consumers became more willing to purchase dairy products. Moreover, health concern also positively influences consumers buying behaviour to purchase dairy products (Xu et al., 2022). Also, it is investigated how people's perceptions of the COVID-19 threat affected their decision to dine out, which is consistent with the threat appraisal's prediction (Wen & Liu-Lastres, 2022).

Interesting research by Ahmeti (2022) found that in Kosovo, consumers tend to purchase a product which produced in developed country because they believe they are of higher quality because for them COO (country of origin) is important factor especially during the pandemic as they want to consumer high quality products because of the health concerns. However, the product's "origin" is not always the deciding factor in consumer decisions. When consumers

selecting the right goods for their needs, many consumers prioritize nutritional safety, aspects and cost (Glogoveţan et al., 2022). According to the investigation of Qi et al (2021), the most certified food products have seen an increase in sales as a result of the pandemic.

Based on the results of research by Cheah & Aigbogun (2022), consumers were tend to purchase organic food during the pandemic because of the health concern. During the COVID-19 pandemic, many Indonesian people exhibited panic behaviour by purchasing necessities in large quantities. A study by Patiro (2022) confirmed that behavioural intentions play a significant role in predicting and explaining actual behaviour. So that, the findings of the research by Vázquez-Martínez et al (2021) showed that regardless of how severe the crisis was in the consumer's country of residence, the results showed that the vast majority of measured respondents had changed their behaviour in terms of their purchasing behaviour, as well as the variety and quality of products they bought. Nguyen's research (2022) revealed that customer purchase intentions were positively influenced by perceived usefulness, perceived ease of use, attitude, and subjective norms, while perceived risk did not significantly impact purchase intention during the pandemic. Additionally, the off-premise dining services, such as takeout/delivery, curbside pickup, and drive-thru, were increasingly used during the pandemic, while in-person dining experiences decreased significantly among consumers, with variations observed across different sociodemographic groups based on age, education, household income, and neighborhood (Abebe et al., 2022). According to Z. Li et al (2022), consumers who perceive a high risk of epidemics are not as willing to eat out, and this perception raises their risk aversion. Additionally, risk aversion is a major reason why people are less likely to purchase restaurant services and products during epidemics. Based on the result of the research by A. Fandrejewska (2022), consumers behaviour is consistent with new consumers' trends described and established in various reports on the influence of the pandemic on consumer's perception of consumer behaviour and globalization.

Some researchers were investigated the influence of the pandemic on consumer purchasing motivation and behaviour by considering geographical location. So, the most important factor is geography in distinguishing changes in consumer behaviour, according to comparative research by Bareja-Wawryszak et al (2022). The study compared changes in consumer behaviour between respondents from Poland and Turkey. The study found that Turkish respondents experienced more significant changes in their purchasing habits and behaviours due to the pandemic compared to Polish respondents.

According to Zuluğ et al (2022), to avoid an infection during the quarantine period in Turkey, people reduced their interactions, shopped online, used contactless payment, and concentrated on disinfection. They also followed doctors' advice, eating more fruits and vegetables, but eating more pastries to improve their mood. Despite their financial constraints, they purchased their groceries at discount stores. Fear is characterized as a highly distressing sensation brought about by an actual or perceived threat of COVID-19, which triggers an increase in consumption patterns among both genders (Vuković et al., 2022). Also, the study by Lim et al (2022), emphasizes the importance of customer satisfaction for luxury services such as fine dining, which are now available to the general public, and provides useful managerial implications for brand owners and managers to effectively market and deliver their services.

Table 8: Existing literature in the changes on purchasing behaviour of consumers in the pandemic: Impulse buying

Authors	Year	Methodology(s)	Key Findings
Elisa H et al.	2022	QN using for PLS-SEM, SOR	The fear of a lack of supply of health supplement products during the pandemic led to impulsive buying behaviour among Indonesian consumers. External stimuli, such as scarcity, had a significant and beneficial impact on perceived value.
Tong T et al.	2022	QN using for Heckman two-stage model	The rate of dairy product purchases significantly increased during the pandemic, driven by consumer willingness and health concerns.

Wen & Liu-Lastres	2022	QN using for PLS-SEM	People's perceptions of the COVID-19 threat influenced their decision to dine out, with threat appraisal playing a significant role.
Ahmeti	2022	QN using for χ^2 test	In Kosovo, consumers tend to purchase products from developed countries due to the belief that they are of higher quality, particularly during the pandemic. Country of origin (COO) is an important factor for consumers, although other factors like nutritional safety and cost also play a role.
Glogoveţan et al.	2022	ED using for SLR	When selecting goods, consumers prioritize nutritional safety, aspects, and cost over the product's origin.
Qi et al.	2021	QN using for PLS-SEM	Certified food products experienced increased sales during the pandemic.
Cheah & Aigbogun	2022	QL using for TPB	Consumers showed a preference for purchasing organic food during the pandemic due to health concerns.

Patiro	2022	QN using for SEM	Behavioural intentions play a significant role in predicting and explaining actual consumer behaviour during the pandemic.
Vázquez-Martínez et al.	2021	QN, QL using for PLS-MGA, PLS-SEM	The majority of respondents changed their purchasing behaviour during the pandemic, including the variety and quality of products bought, regardless of the severity of the crisis in their country of residence.
Nguyen	2022	QN using for TPB,TAM	Perceived usefulness, perceived ease of use, attitude, and subjective norms positively influenced customer purchase intentions during the pandemic, while perceived risk did not significantly impact purchase intention.
Abebe et al.	2022	QN using for BCA	Off-premise dining services such as takeout/delivery, curbside pickup, and drive-thru increased in usage, while in-person dining experiences decreased during the pandemic. Variations were observed across different sociodemographic groups.
Z. Li et al (2022)	2022	QN using for BCA, MRA	Consumers who perceived a high risk of epidemics were less willing to eat out, demonstrating higher risk aversion. Risk aversion was a significant reason for decreased

			restaurant service and product purchases during epidemics.
Fandrejewska, Chmielarz, and Zborowski (2022)	2022	QN using for data interpretation	Consumer behaviour during the pandemic aligns with new consumer trends influenced by the pandemic's impact on consumer behaviour and globalization.
Bareja-Wawryszuk et al.	2022	QN using for χ^2 test	Geographical location plays a significant role in distinguishing changes in consumer behaviour during the pandemic. Turkish respondents experienced more significant changes in purchasing habits and behaviours compared to Polish respondents.
Zuluğ et al.	2022	QN using for BCA	In Turkey, people reduced interactions, shopped online, used contactless payment methods, focused on disinfection, followed doctors' advice, and altered their food consumption patterns during the quarantine period. Financial constraints led to purchasing groceries at discount stores. Fear of COVID-19 triggered increased consumption patterns among both genders.

Vuković et al.	2022	QN using for MRA	Fear of COVID-19 led to increased consumption patterns among both genders, characterized by a highly distressing sensation caused by an actual or perceived threat.
Lim et al.	2022	QL using for SOR, EFA, CFA	Customer satisfaction is crucial for luxury services like fine dining, which were made available to the general public during the pandemic. The study provides useful managerial implications for brand owners and managers in effectively marketing and delivering their luxury services.

Note: QL: Qualitative Techniques (e.g., Case Studies, Observations, Interviews, Delphi technique), QN: Quantitative Techniques (e.g. survey questionnaires, panel data), ED – Existing Database, SEM - Structural Equation Modelling, PLS-SEM: Partial Least Square based Structural Equation Modelling, PLS-MGA - Partial Least Squares Multi-Group Analysis, EFA - Exploratory Factor Analysis, CFA - Confirmatory Factor Analysis, BCA - Bivariate Correlation Analysis, MRA - Multiple Regression Analysis, SOR - Stimuli-Organism-Response model, SLR – Systematic Literature Review, TPB - Theory of planned behaviour, TAM - Theory of Acceptance Model, χ^2 – Chi-squared.

Source: Author's elaboration

The studies presented in Table 8 collectively indicate that the COVID-19 pandemic substantially reshaped consumer purchasing behaviour by increasing uncertainty, health consciousness, risk sensitivity, and emotionally driven purchasing decisions. Previous scholars such as Elisa et al. (2022), Vuković et al. (2022), and Zuluž et al. (2022) demonstrate that fear, perceived scarcity, and pandemic-related anxiety intensified impulsive and precautionary purchasing behaviour, while Tong et al. (2022), Qi et al. (2021), and Cheah and Aigbogun (2022) show that consumers became increasingly focused on health-related products, certified goods, and organic consumption during the crisis period. Similarly, Wen and Wen and Liu-

Lastres (2022), Z. Li et al (2022), and Abebe et al. (2022) emphasize that risk perception significantly influenced consumption decisions, particularly within dining and service-related sectors, contributing to changes in purchasing channels and consumption patterns.

At the same time, Ahmeti (2022), Glogoveţan et al. (2022), and Nguyen (2022) highlight the growing importance of perceived product quality, usefulness, safety, and subjective evaluations in shaping consumer decision-making during the pandemic. Patiro (2022) and Vázquez-Martínez et al. (2021) further suggest that behavioural intentions and crisis-related adaptations affected the variety, quality, and nature of products purchased by consumers. Broader behavioural transformations, including increased online shopping, contactless payments, and changing consumption routines, were also identified by Zuluğ et al. (2022), while Fandrejewska, Chmielarz, and Zborowski (2022) connect these developments with wider consumer trends accelerated by globalization and pandemic-related disruption. In addition, Bareja-Wawryszak et al. (2022) demonstrate that consumer behavioural changes differed across geographical contexts, indicating the importance of cultural and economic environments in shaping purchasing responses. Finally, Lim et al. (2022) emphasize the growing importance of customer satisfaction and consumer experience even within premium and luxury sectors during crisis conditions.

Overall, the literature presented in Table 7 suggests that the pandemic not only altered purchasing priorities and consumption habits but also increased consumers' sensitivity to external stimuli, perceived value, emotional triggers, and risk-related considerations. These behavioural transformations are highly relevant to the present dissertation because they provide an important theoretical foundation for understanding how sales promotions, promotional attractiveness, and impulse purchasing behaviours may evolve during and after periods of economic and social disruption.

3.4. The results of literature

The following section presents the results of the systematic literature review through a descriptive analysis of the selected studies. The reviewed literature is examined according to several analytical dimensions, including publication trends over time, distribution across academic journals, and geographical contribution to the research field. These analyses provide an overview of the development and structure of existing scholarship on sales promotion and consumer buying behaviour during and after the COVID-19 pandemic. By organizing the literature according to these categories, the section aims to identify dominant research patterns

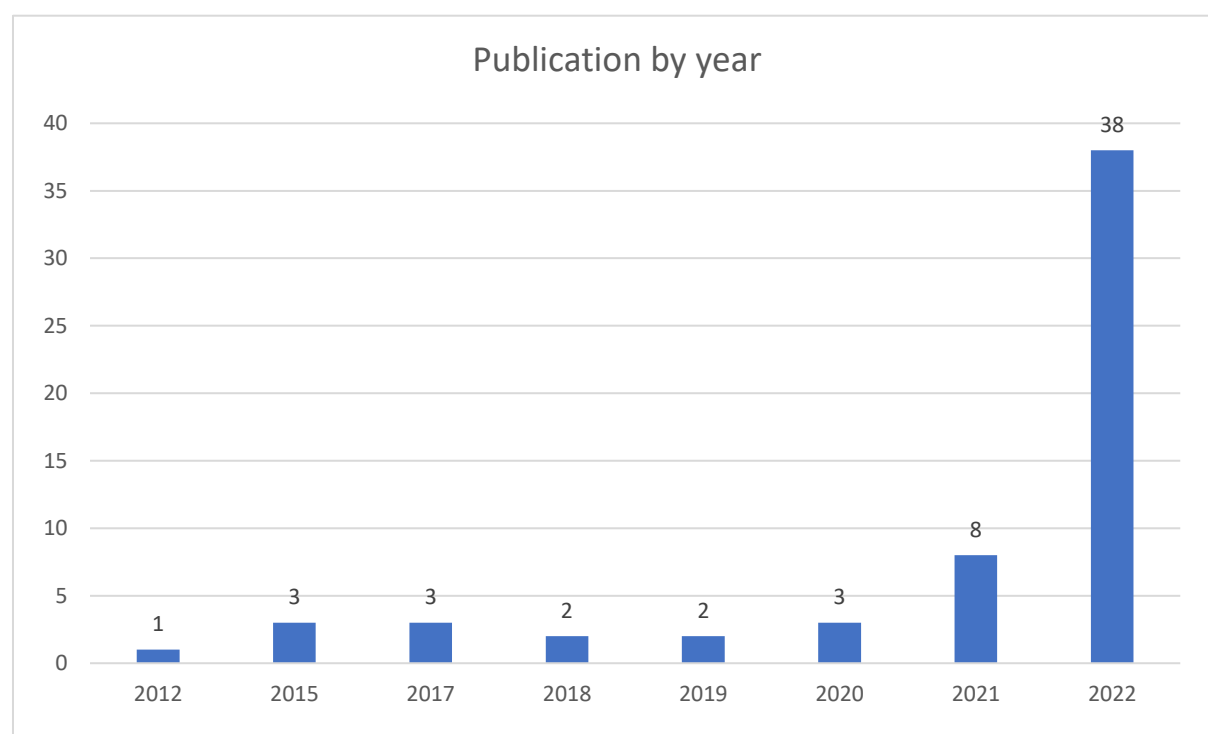
and contextualize the academic evolution of the topic within the broader marketing and consumer behaviour literature.

3.4.1 Annual Scientific Publication

In Figure 3, it is illustrated that the field or topic of the systematic literature review has seen a significant increase in research attention in recent years. The vast majority of publications were published in the past 6 years, indicating a trend towards more recent research.

Furthermore, there was a sharp increase in publications from 2020 to 2022, with 38 publications being published in 2022 alone. This suggests that the field is experiencing rapid growth and attracting increasing attention from researchers. The most prolific year for publications was 2021 with 8 publications, followed by 2015, 2017 and 2020 with 3 publications. Although there were only 2 publications in each of the years 2018, and 2019, this may indicate that research in this field has been ongoing for some time, with renewed interest and attention in recent years.

Figure 3: Annual Distribution of Scientific Articles



Source: Author's elaboration

3.4.2. The distribution of publications across journals

Table 9 provides a valuable glimpse into the distribution of academic publications across various scholarly journals, offering insightful information about research output in different

fields of study. It allows us to identify the prominent academic journals that contribute significantly to the global research community.

Upon analyzing the data, it becomes apparent that a significant portion, 25% to be precise, of the publications were published in the journal Sustainability from Switzerland. This suggests a strong emphasis on studying and addressing sustainable practices and challenges in the country. Furthermore, the Journal of Retailing and Consumer Services accounts for 5% of the publications, indicating its significance in the realm of retail and consumer behaviour research.

Additionally, several journals, such as Foods, Socio-Economic Planning Sciences, and the Journal of Theoretical and Applied Electronic Commerce Research, each contribute 3% of the publications. This signifies their relevance and contributions to their respective fields of study.

It is worth noting that the remaining 60% of the publications fall under the "Others" category, implying a diverse range of academic journals covering various research areas.

Table 9: The distribution of publications across journals.

<i>Journal</i>	<i>N</i>	<i>%</i>
<i>Sustainability (Switzerland)</i>	<i>15</i>	<i>25%</i>
<i>Journal of Retailing and Consumer Services</i>	<i>3</i>	<i>5%</i>
<i>Foods</i>	<i>2</i>	<i>3%</i>
<i>Socio-Economic Planning Sciences</i>	<i>2</i>	<i>3%</i>
<i>Journal of Theoretical and Applied Electronic Commerce Research</i>	<i>2</i>	<i>3%</i>
<i>Others</i>	<i>36</i>	<i>60%</i>
<i>Total</i>	<i>60</i>	<i>100%</i>

Source: Author's elaboration:

Overall, this data allows us to gain valuable insights into the distribution of academic research across different journals, offering a glimpse into the prominent research areas and the significant academic publications within them.

3.4.3. Parts of the World which Contribute the Most

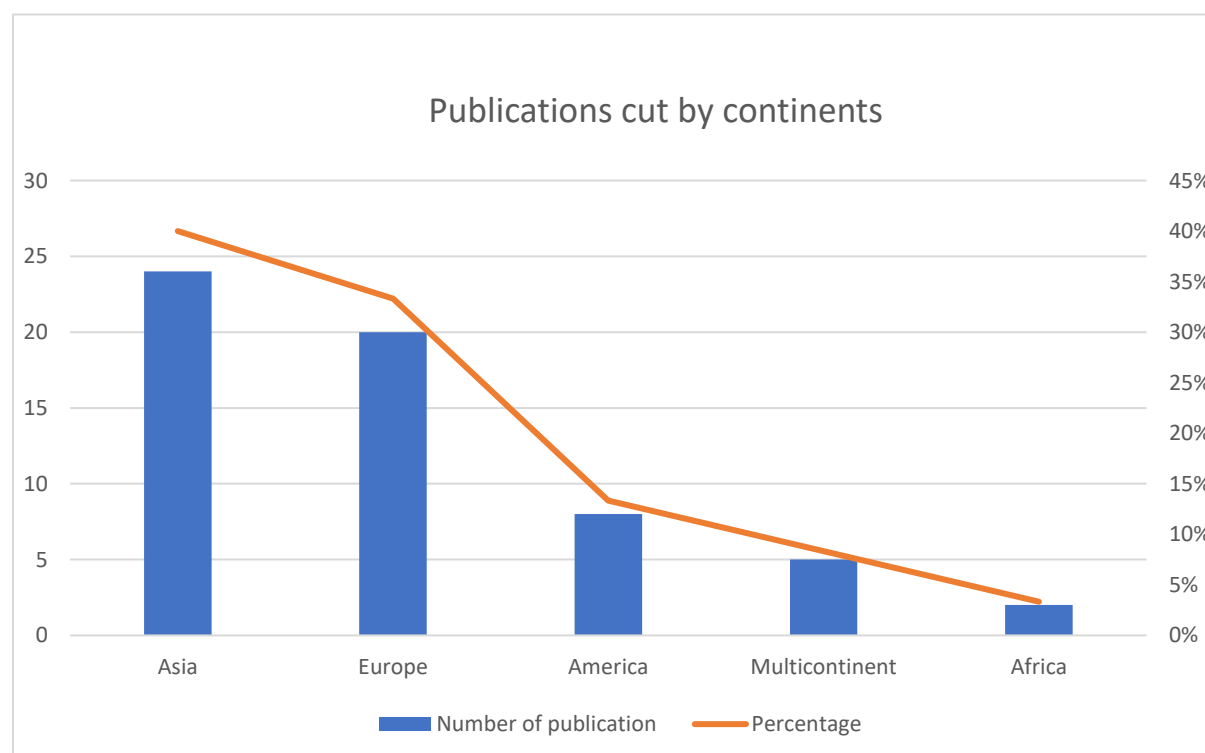
In Figure 4, we can observe the distribution of publications across six continents: Asia, Europe, America, Multicontinent, Africa, and Australia. The data includes a total of 60 publications, and it's important to note that these numbers represent the quantity of publications rather than their quality or impact.

Among the continents, Asia stands out with the highest number of publications, accounting for 24 papers or 40% of the total. This suggests that Asia has a strong presence in scientific research, with significant contributions to various fields. Following closely behind is Europe, which has 20 publications, representing 33% of the total. Europe also demonstrates a robust research infrastructure and funding support.

America, on the other hand, has 8 publications, making up 13% of the total. While this number is lower compared to Asia and Europe, it still indicates a noteworthy contribution to the scientific literature. Multicontinent, a category representing research collaborations spanning multiple continents, accounts for 5 publications or 8% of the total. This highlights the importance of global scientific partnerships and knowledge exchange.

Africa and Australia show comparatively lower numbers of publications. Africa has 2 publications, representing 3% of the total, while Australia has 1 publication, accounting for 2%. These figures may suggest a need for increased support and investment in scientific research in these regions, as they have the potential to contribute more substantially to the global scientific

Figure 4: The volume of publications categorized in different continents.

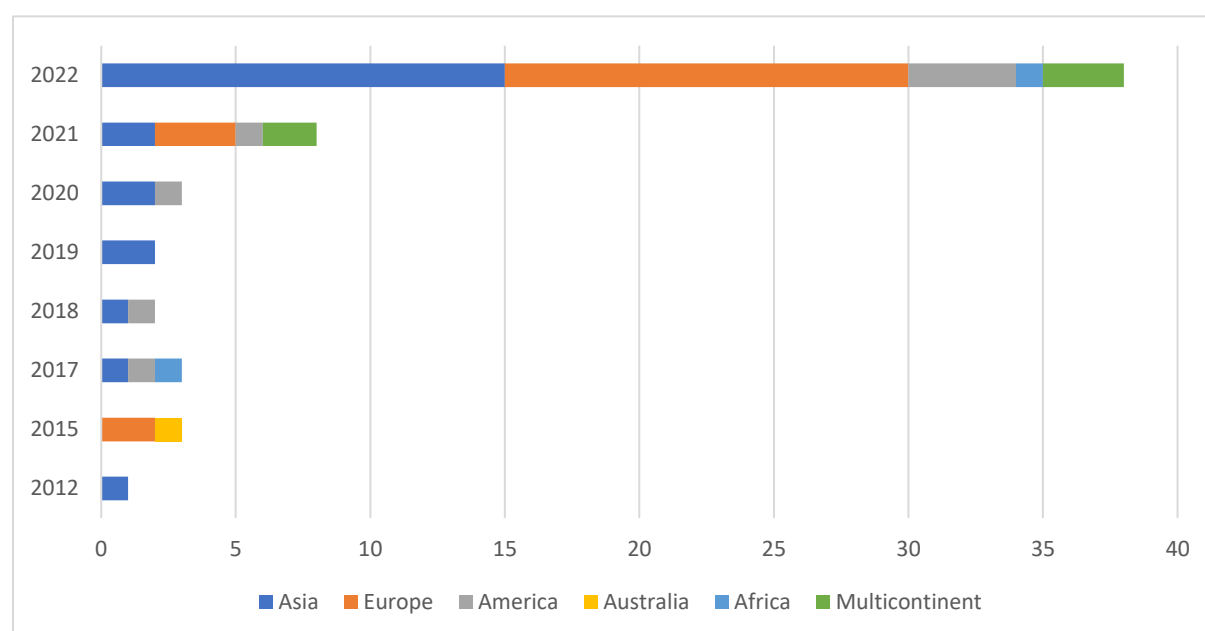


Source: Author's elaboration

It is crucial to emphasize that these statistics only reflect the quantity and geographical origin of the publications. They do not provide insights into the quality, impact, or significance of the research conducted in each continent. Therefore, while Asia and Europe exhibit higher publication numbers, it is important to consider other factors such as research collaborations, funding opportunities, and diverse research perspectives when evaluating the scientific landscape on a global scale.

In Figure 5, we can observe the number of scientific research publications by continent from 2012 to 2022. Asia stands out as the continent with the highest number of published articles, totaling 24 over the 10-year period. Europe follows closely behind with 20 publications, while America contributed 8 publications. Africa had 2 publications, Australia had 1, and the Multicontinental group had 5.

Figure 5: The number of articles published from 2012 to 2022 categorized according to the geographical distribution of cases.



Source: Author's elaboration

When analyzing the publication trends across the years, we notice variations among the continents. Some continents experienced increases, declines, or relatively stable numbers of publications. However, a significant increase in publication numbers can be observed from 2020 to 2022, primarily due to the impact of the global pandemic.

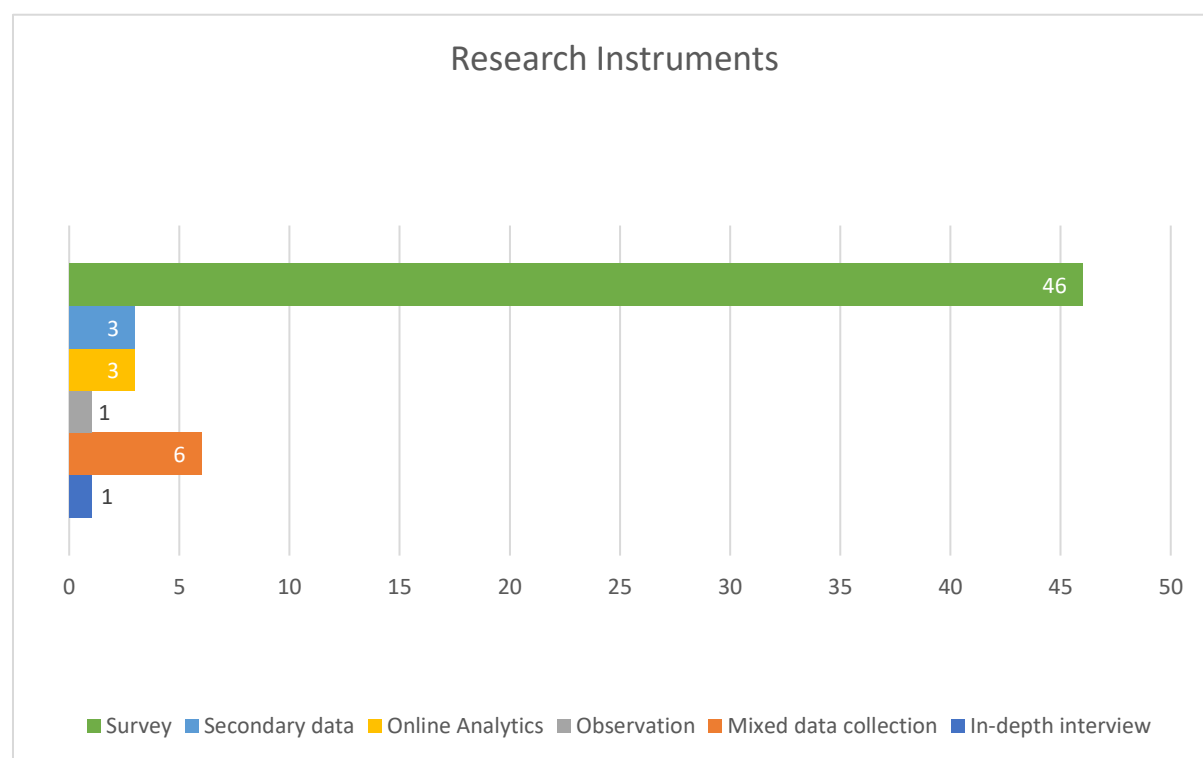
The data depicted in Figure 6 provides valuable insights into the prevalence of different research instruments used in a comprehensive analysis of 60 publications. Among the various

research tools employed, surveys emerged as the most commonly utilized instrument, being employed in a significant majority of the publications, specifically 46 out of the 60.

This observation highlights the widespread adoption of surveys as a preferred method of data collection across diverse fields and industries. Surveys offer researchers a systematic and structured approach to gather information from a large number of participants, enabling them to obtain valuable quantitative data.

Furthermore, the analysis reveals that mixed data collection methods were utilized in six of the publications. This indicates that researchers are increasingly recognizing the advantages of combining multiple data collection techniques to enhance the comprehensiveness of their studies. By employing mixed methods, researchers can acquire a broader range of data, incorporating both quantitative and qualitative aspects, and thereby gaining a more holistic understanding of their research topic.

Figure 6: Number of publications by research instruments



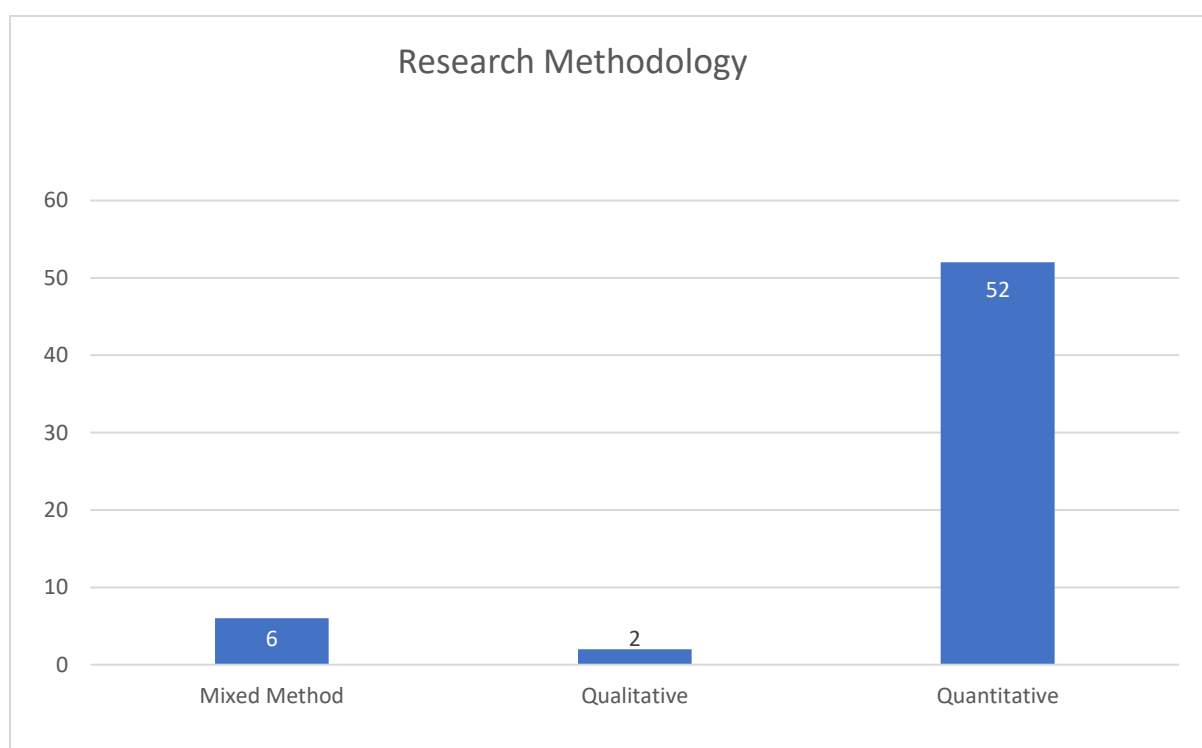
Source: Author's elaboration

The findings also demonstrate that online analytics and secondary data were each employed in three publications. These results suggest that these methods are also prevalent in contemporary research practices. Online analytics leverages the power of digital platforms and tools to analyze vast amounts of data, providing researchers with valuable insights into user behaviour,

trends, and patterns. On the other hand, secondary data involves utilizing existing sources of information, such as previously published studies or publicly available datasets, to answer research questions.

Interestingly, in-depth interviews and observations were less commonly utilized, featuring in only one publication each. Although their frequency of use may be lower compared to other research instruments, in-depth interviews and observations offer researchers the opportunity to delve deeply into specific contexts, capturing nuanced and context-specific data that may be challenging to obtain through other methods.

Figure 7: Number of publications by research methods



Source: Author's elaboration

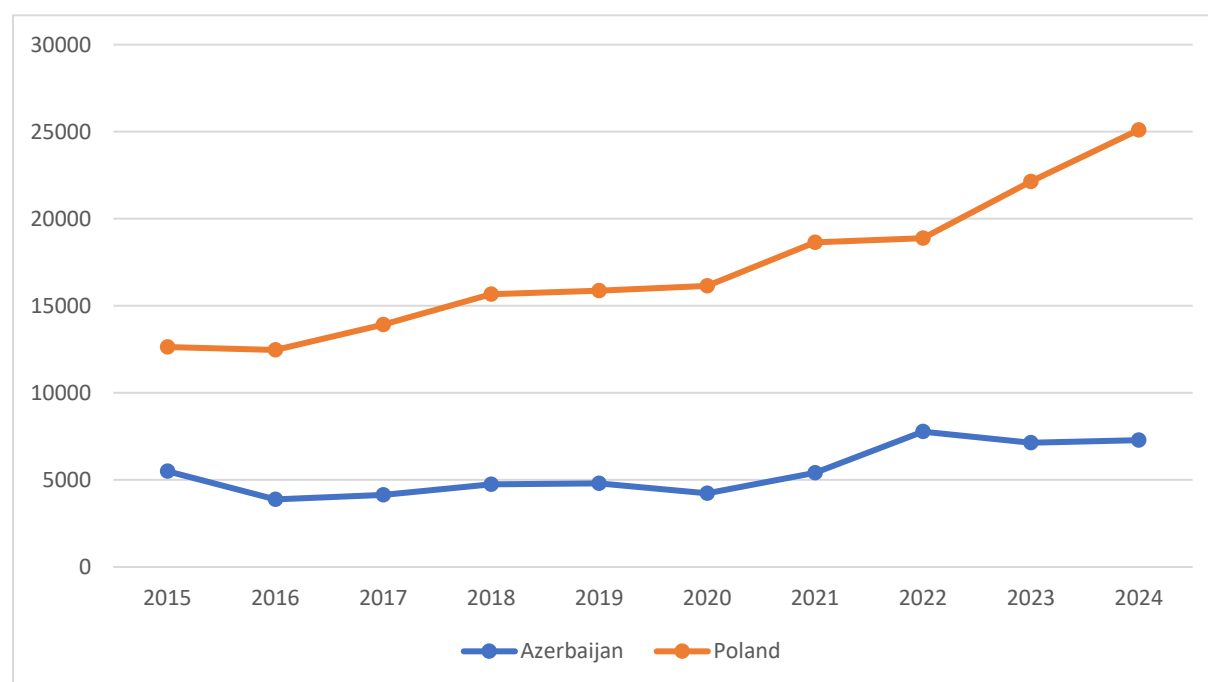
In summary, the figure 7 illustrates that the majority of research in this field has used quantitative methods, while qualitative methods have been used less frequently. Mixed methods have been used in a smaller number of studies but still have some presence in this field. It is important to note that this analysis is based solely on the number of publications and does not account for the quality or impact of the studies.

4. The Socio-Economic and Cultural Landscapes of Azerbaijan and Poland: A Comparative Contextualization

The COVID-19 pandemic represents one of the most disruptive events of the twenty-first century, not only as a public health crisis but also as a profound economic and social shock. Virtually every country faced challenges in sustaining economic growth, maintaining employment, and preserving consumer confidence. GDP per capita, as a measure of average economic output per person, provides an important perspective on how these disruptions were reflected at the individual level. The restrictions on mobility, closures of businesses, and changes in economic activity during lockdowns influenced overall output in ways that continue to shape economies in the post-pandemic era. While some countries demonstrated relative stability in this measure, others exhibited more pronounced fluctuations.

In this section, Poland and Azerbaijan provide an instructive comparison. According World Bank (2024) Poland, as a member of the European Union, has maintained a relatively stable upward trajectory in GDP per capita, reflecting consistent growth in average economic output. Azerbaijan, in contrast, displays a more variable pattern over time, with noticeable fluctuations in GDP per capita. The pandemic period provides a useful point of reference for observing how these trajectories evolved under conditions of uncertainty.

Figure 8: GDP per capita (US\$) - Poland, Azerbaijan



Data source: [World Bank](https://data.worldbank.org/)

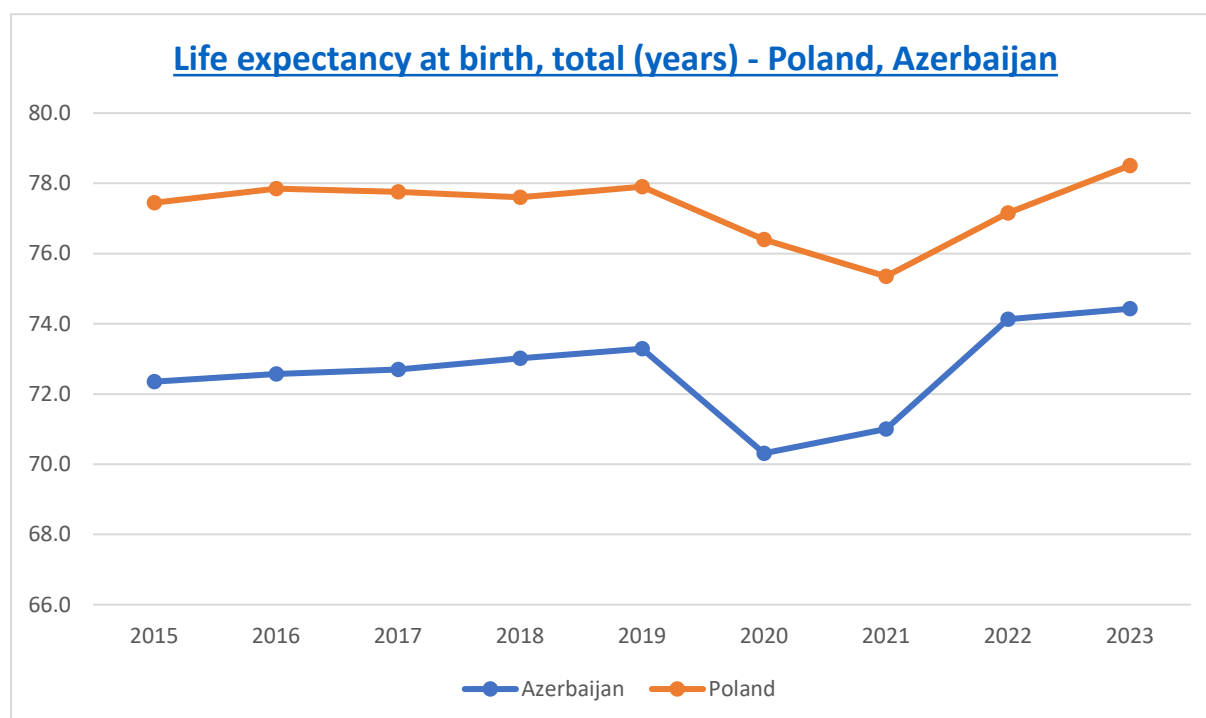
As shown in Figure 8, from 2015 to 2019, Poland demonstrated a steady increase in GDP per capita, rising from approximately \$12,500 to over \$16,000. This pattern reflects a gradual and consistent upward movement over time. Azerbaijan, on the other hand, followed a less stable trajectory. GDP per capita declined from around \$5,500 in 2015 to below \$4,000 in 2016, before increasing gradually to approximately \$4,700–4,800 by 2018–2019.

The year 2020 marked a divergence in the observed patterns. Poland continued its upward movement, with GDP per capita increasing slightly compared to the previous year. In contrast, Azerbaijan recorded a decline in GDP per capita during the same period, indicating a reduction in average output per person.

Post-pandemic developments reveal further differences in the trajectories of the two countries. Poland maintained a steady and continuous increase, with GDP per capita rising from approximately \$16,000 in 2020 to around \$25,000 in 2024. Azerbaijan, by contrast, experienced a more pronounced shift. Following the decline in 2020, GDP per capita increased to approximately \$5,400 in 2021 and reached a peak of around \$7,700 in 2022. In subsequent years, the indicator moderated slightly, stabilizing at approximately \$7,000–7,300 in 2023 and 2024.

Taken together, the data highlights both a persistent difference in levels and distinct patterns of change over time. Poland demonstrates a stable and continuous upward trajectory in GDP per capita across the entire period, while Azerbaijan exhibits greater variability, with more noticeable fluctuations before and after the pandemic.

Figure 9: Life expectancy at birth, total (years) - Poland, Azerbaijan



Data source: [World Bank](#)

The Figure 9 presents life expectancy at birth in Azerbaijan and Poland between 2015 and 2023, based on data published by the United Nations Population Division and the World Bank's World Development Indicators (WDI). Life expectancy “accurately reflects the general state of a particular society” and is strongly linked to economic development and inequality (Stiperski Matoc et al., 2024).

From 2015 to 2019, both countries showed steady improvement - Azerbaijan increased from 72.3 to 73.3 years, and Poland from 77.5 to 77.9 years - indicating social stability and rising living standards (World Bank, 2024). However, during the COVID-19 pandemic, life expectancy fell sharply as both nations faced higher mortality and strained healthcare systems: Azerbaijan dropped to 70.3 years in 2020, while Poland declined to 75.4 years in 2021. This decline represents the pandemic's disruption of public health and its spillover effects on economic activity and consumer behaviour, as uncertainty and financial insecurity reduced non-essential spending.

After 2021, life expectancy rebounded in both countries - reaching 74.4 years in Azerbaijan and 78.5 years in Poland by 2023 - reflecting vaccination success, improved healthcare resilience, and social recovery. This post-pandemic improvement corresponds with renewed

consumer optimism, leading to stronger engagement with sales promotions and a gradual return to pre-pandemic spending pattern

4.1 The Impact of the Pandemic on Consumer Behaviour in Azerbaijan

The COVID-19 pandemic significantly influenced consumer behaviour in Azerbaijan, transforming not only daily purchasing habits but also long-term attitudes toward consumption and technology. As a developing, oil-dependent economy, Azerbaijan faced both global and domestic challenges, including declining energy prices, reduced mobility, and a sudden need for digital adaptation (EXPERT GROUP, 2020). These pressures reshaped consumer preferences, accelerated online shopping, and altered brand loyalty. This section examines how the pandemic affected Azerbaijani consumers through economic disruption, behavioural adjustment, and digital transformation.

4.1.1 Economic and Crisis Context

The COVID-19 pandemic reshaped consumer behaviour patterns in Azerbaijan, altering short-term purchasing decisions and long-term consumption habits. These changes were driven by a combination of economic, psychological, and structural factors, as the country faced global economic pressures and domestic challenges caused by the disruption of supply chains, employment, and mobility.

Azerbaijan entered the pandemic with an economy heavily dependent on oil exports, making it highly vulnerable to external shocks. The simultaneous collapse in global oil prices and the onset of the pandemic created a dual challenge. The Center for Economic and Social Development (EXPERT GROUP, 2020) reported that Azerbaijan's GDP contracted by approximately 2.7% in the first half of 2020, with declines in both the oil-gas and non-oil sectors (EXPERT GROUP, 2020). Despite extensive government intervention, including salary subsidies, tax exemptions, and a ₼3.5 billion (around 3% of GDP) support package, the negative impact on consumer purchasing power and business confidence was significant.

Tourism, a rapidly expanding sector before 2020, experienced a 92% decline in international arrivals during the first five months of the pandemic (EXPERT GROUP, 2020). The combined effects of travel restrictions, unemployment, and declining disposable income led to a contraction of discretionary spending. As Celal Bayar (2022) noted, Azerbaijan faced a “triple crisis” comprising public health concerns, economic instability, and the Second Karabakh War, which further constrained household budgets and shifted consumption priorities from luxury goods to essentials.

4.1.2 Changes in Consumer Behaviour and Digital Adaptation

The pandemic accelerated digital transformation in Azerbaijan and significantly changed how consumers interacted with online platforms. Hasanova, Najafova, and Dilyard (2023) found that lockdowns and social distancing measures caused a large-scale migration toward e-commerce, as consumers began purchasing groceries, hygiene products, and household essentials online.

These behavioural changes were influenced by both psychological and infrastructural factors, including perceived health risks and the growing convenience of digital payment systems. Technologies such as QR codes, mobile wallets, and contactless payments gained widespread adoption, reflecting an improvement in digital literacy among Azerbaijani consumers.

E-commerce companies adapted their operations to meet changing consumer expectations by enhancing logistics and communication strategies. The expansion of local online marketplaces during this period not only met consumer needs but also laid the foundation for long-term structural change in the retail ecosystem.

Rahmanov, Suleymanov, and Alakbarova (2022) highlighted the increased use of digital tools among Azerbaijani consumers, who increasingly relied on online information and marketing channels during lockdowns. Their findings showed that firms invested more in online advertising, social media, and socially responsible marketing to sustain engagement and trust.

4.1.3 Product Preferences, Brand Loyalty, and Value Perception

During the pandemic, Azerbaijani consumers showed notable changes in brand preference, particularly in the food sector. Quliyev (2021) reported that brand loyalty weakened as consumers prioritized availability, affordability, and safety over brand image. Panic buying and hoarding behaviour, especially for staple goods such as rice and flour, became widespread. The study also found that many consumers substituted imported brands with local alternatives due to price considerations and supply chain disruptions.

Although brand loyalty declined, awareness of ethical, health-oriented, and locally produced goods increased, reflecting a growing sense of consumer consciousness. This suggests an emerging orientation toward social and environmental responsibility in Azerbaijan's marketplace.

4.1.4 Post-Pandemic Shifts and Long-Term Implications

The tourism and hospitality sectors, which were central to Azerbaijan's diversification strategy, were among the hardest hit by the pandemic. Border closures and mobility restrictions led to near-total stagnation in the tourism industry. However, their study also noted a rise in domestic tourism, self-organized travel, and health-oriented leisure activities. These developments indicate that consumer priorities are increasingly shifting toward safety, wellness, and sustainable domestic travel (Rahmanov et al., 2020).

Overall, the pandemic acted as a catalyst for digital modernization, driving consumers toward convenience, safety, and online engagement. The Azerbaijani case illustrates how economic vulnerability and technological adaptation combined to redefine consumption patterns in a post-crisis environment.

4.2 The Impact of the Pandemic on Consumer Behaviour in Poland

The COVID-19 pandemic had a profound impact on consumer behaviour in Poland, influencing both economic and psychological aspects of consumption (Werner-Lewandowski et al., 2021). As a European economy with a growing digital infrastructure and evolving retail system, Poland provides valuable insights into how health crises reshape purchasing priorities and social values (Celińska-Janowicz & Dolega, 2024). Polish consumers adapted to new realities through digital adoption, value reorientation, and increased awareness of health and sustainability. This section examines how the pandemic transformed consumption in Poland through crisis response, behavioural change, and long-term adaptation.

4.2.1 Economic and Crisis Context

The COVID-19 pandemic reshaped consumer behaviour worldwide, with Poland serving as a dynamic case due to its transitional economy, evolving retail structure, and distinct sociocultural conditions. The first confirmed case of COVID-19 in Poland on 4 March 2020 was followed by strict lockdowns and retail restrictions that redefined perceptions of value, safety, and trust (Niewczas-Dobrowolska et al., 2024).

The early phase of the pandemic was marked by anxiety and uncertainty, which strongly affected consumption patterns. Panic buying and stockpiling behaviours appeared as consumers feared supply shortages (Niewczas-Dobrowolska et al., 2024). Perceived stress and trust in information sources were major predictors of these behaviours. Individuals who experienced greater stress and relied on media updates were more likely to over-purchase essential goods such as flour, pasta, and toilet paper (Jeżewska-Zychowicz et al., 2020).

Further evidence of stress-related consumption came from Chodkiewicz (2020), who observed increased alcohol use among adults under psychological strain. Trzebiński, Baran, and Marciniak (Trzebiński et al., (2021) noted that consumers preferred shopping alone and avoiding crowds, while Di Crosta (2021) found that anxiety and perceived threat contributed to precautionary and impulsive buying across Europe.

4.2.2 Changes in Consumer Behaviour and Digital Adaptation

The pandemic fundamentally altered purchasing channels in Poland. Restrictions on physical retail and fear of contagion accelerated the shift toward digital and hybrid models. Kusz et al. (2023) reported a decrease in supermarket and mall visits and a simultaneous increase in online and local store purchases. Convenience came to be defined by hygiene, safety, and proximity rather than price or variety.

Evidence from Borkowski et al., 2020) indicated that limited mobility encouraged neighborhood-based and pedestrian shopping. Górka-Chowaniec and Sikora (2022) observed that food service providers emphasized hygiene certification and contactless service to maintain trust.

Polish consumers reduced shopping frequency but increased purchase volume per trip to limit exposure. Contactless payments and click-and-collect services became particularly popular among younger consumers, showing that the pandemic normalized digital shopping behaviours that continued into 2022 (Helisz et al., 2021).

4.2.3 Product Preferences, Brand Loyalty, and Value Perception

Beyond the shift in purchasing channels, the pandemic also changed how consumers evaluated products. Health, safety, and local origin became central decision-making criteria. Consumers increasingly favored Polish-made and organic products, which were perceived as safer and more trustworthy (Buraczyńska et al., 2022)

Śmiglak-Krajewska and Wojciechowska-Solis (2021) found that Polish consumers began to associate organic and local food with personal health protection, redefining value in moral and health-related terms. Studies by Sidor and Rzymiski (2020) and Górnicka et al. (2020) revealed two opposing dietary trends: some consumers adopted healthier eating habits and cooked at home, while others increased their consumption of snacks and processed foods as a response to stress and boredom. These findings show that the pandemic polarized Polish consumers between health-conscious and comfort-oriented lifestyles.

4.2.4 Post-Pandemic Shifts and Long-Term Implications

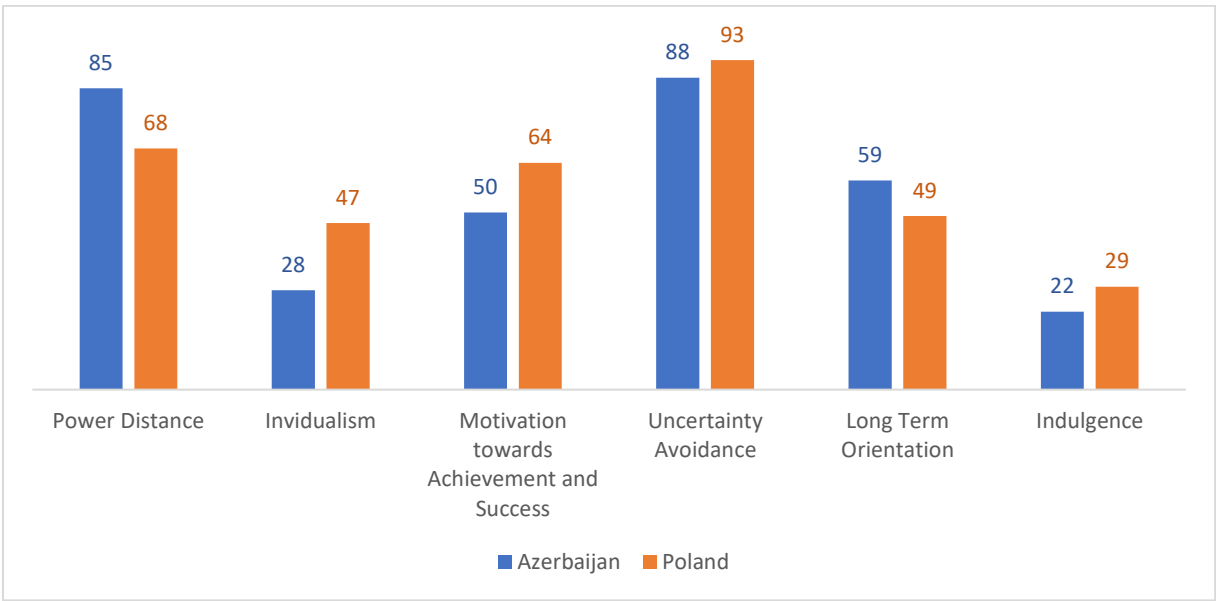
By late 2022, some behaviours developed during the pandemic had become lasting habits. Digital retail and local supply chains continued to dominate, and health-conscious consumption remained higher than before the crisis (Niewczas-Dobrowolska et al., 2024).

Income and demographic factors shaped the persistence of these trends. Households with stable employment maintained or increased spending on non-durable goods (Gębski, 2021), while others restricted purchases to essentials. Studies by Fandrejewska, Chmielarz, and Zborowski (2022) and (Wojciechowska-Solis et al., 2022) indicated that sustainability, local origin, and corporate responsibility became more important in shaping consumer trust and loyalty.

4.3 Cultural Comparison

This section presents a comparative cultural analysis of Azerbaijan and Poland using six-dimensional cultural framework by Hofstede (2011). The analysis examines how the two countries differ and align in terms of hierarchical acceptance, social relationships, motivation, uncertainty management, time orientation, and restraint. Based solely on national culture scores and their definitions, the comparison is interpretative and relative, aiming to identify dominant societal value patterns rather than individual behaviours. Figure 10 illustrates a comparative overview of Azerbaijan and Poland across Hofstede’s six cultural dimensions, providing a visual representation of their relative cultural similarities and differences. The chart facilitates a clear comparison of how each country scores on key societal value dimensions.

Figure 10: Cultural Dimension Profiles of Azerbaijan and Poland



Data Source: [The Culture Factor Group](#)

Power Distance

Power Distance reflects the extent to which inequality in power and authority is accepted and legitimized within a society. In the comparison between Azerbaijan and Poland, both countries display a clear acceptance of hierarchical structures, although the intensity of this acceptance varies. Azerbaijan's very high score of 85 indicates that unequal power distribution is deeply embedded and socially accepted without the need for justification. Authority figures are perceived as distant, and hierarchy is understood as a reflection of inherent inequalities rather than functional necessity. This perception legitimizes the allocation of greater privileges and benefits to power holders, making status symbols an important aspect of social life. Poland, with a score of 68, also demonstrates acceptance of hierarchy, but the distance between power holders and subordinates is relatively less pronounced. In the Polish context, hierarchy is associated with centralization and directive leadership, where subordinates expect clear guidance from authority figures rather than unquestioned distance.

Individualism vs. Collectivism

The Individualism dimension examines whether people's self-image is primarily defined in terms of "I" or "We" and the degree of interdependence among members of society. Azerbaijan's low score of 28 clearly positions it as a collectivist culture, where individuals are strongly integrated into cohesive in-groups from an early stage of life. In such societies, loyalty to the group is paramount and often outweighs formal rules or individual interests. Relationships tend to be long-term, and group members are expected to protect and support one another. Social offenses are likely to result in shame and loss of face, reinforcing conformity and group cohesion. Poland, with a score of 47, occupies an intermediate position on this dimension, indicating the absence of a dominant individualistic or collectivist orientation. This suggests that both personal autonomy and group affiliation coexist in Polish society without one clearly prevailing.

Motivation towards Achievement and Success

The dimension of Motivation towards Achievement and Success captures whether a society is driven more by competition, achievement, and performance or by consensus, cooperation, and quality of life. Azerbaijan's intermediate score of 50 indicates a balanced cultural orientation, where neither achievement-driven nor consensus-oriented values clearly dominate. This suggests that competitive success is emphasized in certain social or organizational contexts, while in others, harmony and quality of life may be more highly valued. The coexistence of

these orientations points to a culturally flexible understanding of success. In contrast, Poland's score of 64 identifies it as a Decisive society, where achievement, competition, and performance are central values. Individuals in such a cultural context are expected to be assertive and results-oriented, and success is often defined by being the best or most accomplished in a given field. As a result, work and performance tend to play a central role in social evaluation and organizational life.

Uncertainty Avoidance

Uncertainty Avoidance describes the extent to which members of a society feel threatened by ambiguity and unknown situations and seek to minimize them through rules and structures. Both Azerbaijan and Poland score very high on this dimension, indicating a strong preference for predictability and control. Azerbaijan's score of 88 suggests that uncertainty is perceived as a significant source of anxiety, leading to reliance on rigid rules, laws, and behavioural norms. Change is not readily embraced, and unorthodox ideas or behaviours are often met with resistance. There is a strong emotional need for clear structures to reduce ambiguity and maintain social order. Poland's even higher score of 93 reflects an exceptionally strong avoidance of uncertainty. In Polish society, precision, punctuality, and adherence to rules are emphasized, and there is a strong inner drive to remain busy and productive. Although both societies demonstrate high uncertainty avoidance, Poland shows a slightly stronger dependence on formal structures to manage uncertainty.

Long-Term Orientation

Long-Term Orientation addresses the extent to which a society prioritizes future-oriented pragmatism over adherence to traditional norms and practices. Azerbaijan's score of 59 indicates a relatively pragmatic cultural orientation, where traditions are adaptable rather than fixed. In this context, truth is often seen as dependent on circumstances, and perseverance, thrift, and sustained effort are valued as ways of preparing for future outcomes. The emphasis is on adjusting to changing conditions while maintaining continuity with the past. Poland's score of 49 suggests no strong preference for either a long-term pragmatic or a short-term normative orientation. This reflects a cultural balance in which respect for tradition coexists with openness to change. As a result, Polish society does not display a clearly dominant temporal focus, instead combining elements of both continuity and adaptation.

Indulgence vs. Restraint

The Indulgence dimension reflects the degree to which societies allow the gratification of human desires related to enjoying life and having fun. Both Azerbaijan and Poland score low on this dimension, indicating cultures of restraint. Azerbaijan's score of 22 suggests strong social regulation of desires and impulses, with individuals perceiving their behaviour as constrained by social norms. Leisure and self-indulgence are not highly emphasized, and there is a tendency toward pessimism and cynicism. Poland's score of 29 reflects a similarly restrained cultural orientation, although slightly less pronounced. In Polish society, social norms also play a strong role in limiting gratification, and leisure is not considered a primary indicator of success. Overall, both cultures prioritize self-control and adherence to social expectations over personal indulgence.

5. Research Methodology

This chapter presents the overall methodological approach adopted to address the research objectives and hypotheses of the study. To examine changes in consumer buying behaviour toward sales promotions across the pandemic and post-pandemic periods, the research is grounded in a mixed-method design that integrates quantitative and qualitative methods (Agrawal, 2023; Chanda & Pabalkar, 2024; Mehaba & Gil, 2025). A mixed methods approach was employed to complement the quantitative findings derived from the survey and hypothesis testing with qualitative insights obtained through in-depth interviews. This approach was selected to allow systematic testing of relationships and differences in promotional responsiveness while simultaneously capturing the contextual and interpretive dimensions of consumer decision-making. The methodology is structured to support temporal comparison, cross-cultural analysis between Poland and Azerbaijan, and triangulation of findings, thereby strengthening the reliability and validity of the results. The following sections detail the data collection method, research instruments, hypothesis procedures employed to ensure that the study's findings are both empirically robust and theoretically meaningful.

5.1 Data Collection method

This study adopted a mixed-method data collection approach to adequately address the research objectives and to capture both measurable patterns and underlying explanations of consumer behaviour toward sales promotions during and after the COVID-19 pandemic. Primary data were collected through two complementary methods: an online survey and in-depth interviews, allowing quantitative and qualitative evidence to be integrated within a single research design.

Mixed-method research has become increasingly prominent in marketing and consumer behaviour because it enables scholars to capture both observable behavioural patterns and the underlying psychological mechanisms that drive consumption decisions in complex contexts. The recognition of mixed-method research as a distinct research paradigm reflects the need to examine multifaceted marketplace phenomena, such as the evolution of promotional responsiveness during and after the COVID-19 pandemic, through complementary methodological lenses (Johnson & Onwuegbuzie, 2004; Bliss, 2008). Methodological authorities emphasize that integrating qualitative and quantitative approaches enhances the breadth and depth of inquiry while strengthening alignment between research objectives, questions, and hypotheses (Tashakkori et al., 2010).

From a design perspective, mixed-method strategies allow the adoption of sequential or concurrent structures depending on whether the purpose is exploration, theory testing, or comparison (Morse, 2010; Morgan, 2017). In this study, this integration supports the systematic examination of how consumer responses to price discounts, bundling, buy one get one free offers, coupons, loyalty programs, and free trials evolved from the pandemic to the post-pandemic period. Triangulation further enhances credibility by corroborating behavioural evidence with perceptual and attitudinal data (Denzin, 2012; Bryman, 2006).

The value of mixed-method research is particularly evident in consumer behaviour, where purchasing decisions are shaped by cognitive, emotional, and situational factors. Quantitative models effectively test relationships such as the impact of promotional exposure on impulse buying, while qualitative insight explains the meanings consumers attach to different promotional formats (Belk & Malhotra, 2017). Consistent with established marketing research practice, survey based measurement in this study captures shifts in promotional effectiveness and frequency sensitivity across the pandemic timeline, while interpretive insight supports analysis of perceived deal attractiveness and cross cultural differences between Azerbaijani and Polish consumers (Belk & Malhotra, 2017; de Ruyter & Scholl, 1998).

Prior research demonstrates that mixed-method designs improve explanatory richness and managerial relevance in retail and technology mediated environments (Venkatesh et al., 2013). Empirical evidence also shows that combining qualitative exploration with quantitative validation provides a more holistic understanding of customer value creation in physical retail contexts (Nöjd et al., 2020). In addition, applied mixed-method literature confirms that integrating multiple forms of evidence strengthens hypothesis testing and supports nuanced interpretation of behavioural change over time (Hanson et al., 2005).

Building on these mixed-method research principles and the need for systematic empirical measurement, the quantitative phase of the study was implemented through an online survey. The structured questionnaire provided standardized, comparable data on demographic characteristics, shopping frequency, decision-making factors, and perceptions of different promotional tools (e.g., price discounts, free trial, bundling, coupons, loyalty cards, and “buy one get one free” offers). Collecting survey data in this format allowed the application of nonparametric statistical techniques, correlation analyses, group comparisons, and profiling methods to identify behavioural patterns, changes over time, and cross-cultural differences in promotional responsiveness. The online format further ensured access to a broad and diverse respondent pool, supporting robust statistical analysis and generalizability of findings. The

online format further ensured access to a broad and diverse respondent pool, supporting robust statistical analysis and greater generalizability of findings. This approach was particularly appropriate given the substantial growth in internet penetration in both Poland and Azerbaijan over recent years. According to (World Bank, 2025) data, internet usage in Poland increased from approximately 68% of the population in 2015 to nearly 89% in 2025, while Azerbaijan experienced similar digital expansion, rising from approximately 77% in 2015 to over 90% in 2025. These statistics demonstrate a high level of digital accessibility and indicate that online survey distribution was methodologically suitable for reaching consumers across different demographic and socio-economic groups in both countries. The increasing level of internet usage also reflects the rapid expansion of e-commerce, digital communication, and online promotional exposure during and after the COVID-19 pandemic, further supporting the use of an online research instrument in the present study (Brüggemann & Olbrich, 2023; Cuong, 2024; Nunes Cruz et al., 2025).

In parallel, in-depth interviews were used as a qualitative data collection method to complement the survey results. While the survey captured the extent and direction of behavioural change, the qualitative data provided interpretive insight into how and why consumers responded to promotions differently across the pandemic timeline and cultural contexts. Together, the combination of quantitative and qualitative data collection strengthened methodological rigor through triangulation, ensuring that observed statistical relationships were supported by contextual and experiential understanding.

5.2 Research Instrument

The research instruments used in this dissertation were designed to comprehensively examine consumers' behavioural responses to sales promotions during and after the COVID-19 pandemic. Since consumer behaviour is influenced by both measurable behavioural patterns and deeper psychological, cultural, and contextual factors, the study adopted a mixed-method research design consisting of quantitative and qualitative instruments. The quantitative component utilized a structured survey questionnaire to collect standardized data regarding shopping behaviour, promotional attractiveness, purchasing tendencies, and promotional preferences across a larger sample population. In parallel, the qualitative component employed semi-structured in-depth interviews to gain deeper insights into consumers' experiences, motivations, perceptions, and interpretations of promotional strategies in both Azerbaijan and Poland. The integration of these two research instruments enabled the study to achieve both

statistical analysis and contextual understanding, thereby providing a more comprehensive evaluation of changes in consumer behaviour from the pandemic to the post-pandemic period.

5.2.1 Quantitative research instrument

The survey instrument was selected as the primary quantitative research tool because previous scholars have consistently emphasized its effectiveness in measuring consumer attitudes, purchasing behaviour, perceived value, and promotional responsiveness across large populations. A. Burlea-Schiopoiu et al. (2022) employed structured surveys with Likert-scale measurements to assess consumer attitudes toward food delivery services during the pandemic, while Dincă and Dima (2022) used online surveys to investigate online purchasing behaviour and changing consumption habits during COVID-19. Similarly, Gruntkowski and Martinez (2022) utilized longitudinal survey methods to examine changes in online grocery shopping behaviour over time. Previous studies by Haudi et al. (2022), Jee (2021), and (Sinha & Verma, 2020) also relied on quantitative survey instruments to examine the relationship between sales promotions, perceived value, purchase intention, and consumer behaviour. These studies confirm that surveys are highly effective for identifying statistical relationships between promotional variables and behavioural outcomes. In addition, surveys allow researchers to collect standardized responses from large and diverse samples, which is essential for comparative cross-cultural analysis such as the comparison between Azerbaijani and Polish consumers conducted in this dissertation. The survey instrument is particularly suitable for this study because it enables the measurement of consumers' reactions toward different promotional tools, including price discounts, bundling, Buy One Get One Free (BOGO), coupons or vouchers, loyalty programs, and free trials. Furthermore, the use of Likert-scale questions provides the opportunity to evaluate changes in promotional attractiveness, promotional sensitivity, impulse purchasing tendencies, and behavioural responses across the pandemic and post-pandemic periods. Since the research also aims to test hypotheses and examine relationships between variables, the survey method provides the statistical foundation necessary for quantitative analysis and hypothesis testing.

Purpose

The study adopts a quantitative research design suitable for examining and comparing consumers' self-reported attitudes, perceptions, and purchasing behaviours regarding sales promotions during and after the COVID-19 pandemic. The research relies on respondents' retrospective evaluations and subjective assessments of their behaviours across the two periods rather than on repeated longitudinal observation over time. This design enables structured and

standardized data collection, supporting the analysis of behavioural patterns, promotional responsiveness, and perceived changes in consumer decision-making across a broad sample population.

The primary goal of the questionnaire is to capture and compare consumer behaviour and preferences during the pandemic versus the post-pandemic period, especially concerning various promotional deal types. This comparative design helps identify shifts in how consumers respond to and value promotions.

Table 10 outlines the structure of the survey instrument used in the dissertation. The questions progress from demographic profiling to shopping behaviour, perceptions, attitudes, and promotional preferences, enabling a comprehensive analysis of consumer responses to sales promotions. This structure supports both segmentation analysis and evaluation of how promotional effectiveness and preferences have evolved in the post-pandemic context.

Table 10: Overview of Questionnaire Structure and Objectives

Section	Question Number	Question Content	Purpose
1. Demographic Information	1-5	- Age - Gender - Employment Status - Education Level - Household Income	To segment responses by demographic characteristics, which allows for nuanced analysis of consumer behaviour.
2. Shopping Behaviour	6-8	- Shopping frequency - Time spent shopping - Decision-making factors	To understand baseline shopping habits and priorities, assessing how often and why consumers shop post-pandemic.
3. Perceptions of Promotional Deals	9-28	- Changes in purchasing behaviour - Attractiveness and visibility of various promotions (e.g.,	To evaluate how consumer responses to different promotional strategies have evolved from during to after the pandemic.

		price discounts, loyalty cards, etc.)	
4. Attitudes Towards Promotions	29-30	- Attitudinal statements regarding the impact of promotions during and after the pandemic	To measure consumer attitudes towards the effectiveness and appeal of sales promotions, exploring behavioural influences and perceptions of value.
5. Promotional Preferences	31	- Preference for types of promotions across different product categories	To identify which promotional deals are preferred for specific types of products, enhancing understanding of targeted promotional strategies.

Source: Author's elaboration

The survey questionnaire was structured into five main sections to systematically examine consumer behaviour and responses to sales promotions during and after the COVID-19 pandemic. The first section collected demographic information, including age, gender, employment status, education level, and household income, to support comparative analysis across consumer groups. The second section focused on shopping behaviour, including shopping frequency, time spent shopping, and key purchasing decision factors. The third section examined consumers' perceptions of different promotional deals, such as price discounts, bundling, loyalty programs, Buy One Get One Free (BOGO), coupons, and free trials, in order to evaluate changes in promotional responsiveness from the pandemic to the post-pandemic period. The fourth section measured attitudes toward sales promotions and their perceived effectiveness, while the final section explored consumers' preferences for promotional types across different product categories. The selected product categories represented primarily physical retail and routine consumption sectors in order to enable consistent comparison of promotional preferences between Azerbaijani and Polish consumers. Within this category-based framework, Free Trial or Demo was excluded because such promotional mechanisms are comparatively less applicable across several of the examined product categories and primarily function as product adoption and risk-reduction tools rather

than recurring transactional incentives associated with routine purchasing behaviour (Yi & Jeon, 2003; Wen & Liu-Lastres, 2022). Overall, the survey layout was designed to provide a comprehensive understanding of consumer purchasing behaviour and promotional preferences.

Data Collection Procedure

The quantitative data were collected through an online questionnaire administered via Google Forms between July 2024 and December 2025. The survey targeted respondents from two countries, Poland and Azerbaijan, resulting in a final sample of 300 respondents, consisting of 150 Azerbaijani and 150 Polish participants. The questionnaire was conducted in three language versions: English, Polish, and Azerbaijani, in order to ensure linguistic accessibility and improve respondent comprehension across the sampled populations.

The survey was distributed using the snowball sampling technique (KORKMAZ & SEYHAN, 2021; Murad et al., 2022), whereby respondents were initially recruited through online distribution channels, including social media platforms and digital networks (Madhuhansi, 2018; Yoshida et al., 2013). The survey link was then circulated further through participant sharing and personal networks, which enabled the researcher to reach respondents across two different national contexts (Szolnoki & Hoffmann, 2013). The snowball sampling technique was considered appropriate for this study because the research examined purchasing behaviour across two different countries, Poland and Azerbaijan, where direct access to a broad respondent group was limited. Since the study required respondents with relevant experience related to purchasing behaviour and sales promotions during and after COVID-19, participant referrals helped the researcher reach individuals who matched the objectives of the study. In addition, the online and cross-cultural nature of the research made network-based survey distribution suitable for reaching geographically dispersed respondents in an efficient and consistent manner.

The questionnaire was designed using mandatory response settings within Google Forms, which ensured that participants could not submit incomplete questionnaires. Consequently, all respondents who initiated the survey completed it in full, and no responses were excluded during the data screening process. This approach contributed to the completeness and consistency of the dataset used for the quantitative analysis.

The online method of data collection was considered appropriate due to its accessibility, geographical flexibility, and effectiveness in reaching respondents from both Poland and Azerbaijan. The extended data collection period was also consistent with the post-pandemic

focus of the dissertation, as it allowed the study to capture respondents' perceptions and behavioural responses toward sales promotions within a relatively stabilized post-pandemic market environment.

Questionnaire Design

The questionnaire is structured to address specific research questions about consumer behaviour and promotional engagement. It is divided into sections targeting demographic characteristics, shopping behaviours, attitudes toward different promotional types, and behavioural comparisons between the pandemic and post-pandemic periods.

Question Types and Their Purposes

- **Closed-Ended Questions:** These questions gather demographic information (e.g., age, gender, income), providing a foundational basis for understanding consumer groups and for segmenting the data. Closed-ended questions also facilitate comparisons across different demographics.
- **Likert-Scale Questions:** Likert scales are employed to measure the intensity of consumer attitudes toward various promotional types, both during the pandemic and post-pandemic periods. These questions enable nuanced insights into how the attractiveness and perceived value of specific promotions have changed over time.
- **Frequency-Based Questions:** These questions quantify shopping habits and frequency, allowing for a clear comparison of consumer engagement levels during and after the pandemic. Understanding frequency differences provides insights into shifts in general shopping behaviours and promotional responsiveness.
- **Multiple-Choice Questions:** Used to capture the range of factors influencing purchase decisions, such as price, brand, and promotional offers. This format helps identify which promotional attributes were most important to consumers and how their importance may have shifted over the study period.
- **Open-Ended Questions:** These questions invite respondents to elaborate on their purchasing behaviour and any specific changes they observed over time. Open-ended responses add qualitative depth to the quantitative findings, providing context for the observed shifts in consumer preferences.

5.2.2 Qualitative research instrument

The qualitative component of this study was designed to explore the deeper meanings, explanations, and subjective experiences underlying consumers' responses to sales promotions

during and after the COVID-19 pandemic. While the quantitative survey allowed measurement of relationships between specific promotional tools and consumer behaviours, the qualitative phase enabled a richer understanding of *why* such behaviours emerged and *how* individuals interpreted promotional stimuli across different cultural contexts.

Consumer responses to promotions are often influenced by psychological interpretations, cultural values, personal experiences, and situational factors that cannot always be captured through numerical measurements alone (Hanaysha, 2018; Santini et al., 2015a; Sheth, 2020). For this reason, in-depth interviews were selected as the qualitative research instrument in this dissertation. Wahyuningsih et al. (2022) employed semi-structured in-depth interviews to explore generational differences in food purchasing behaviour, demonstrating how qualitative methods provide deeper understanding of behavioural motivations and perceptions. Similarly, Morales et al. (2023) used structured interviews to assess consumer preferences toward sustainable brands, while Ababneh (2023) adopted an in-depth case-based qualitative approach to examine consumer perceptions regarding electronic word-of-mouth in tourism marketing. Previous studies by Hawaldar et al. (2019), Cheah and Aigbogun (2022), and (Amornpinyo, 2022) further demonstrate that qualitative methods are highly effective for understanding consumer experiences, emotional responses, and behavioural adaptations during periods of economic uncertainty and crisis. In the context of the present dissertation, in-depth interviews are particularly important because they provide the opportunity to explore how consumers personally interpret promotional offers, how their attitudes toward promotions evolved from the pandemic to the post-pandemic period, and how cultural and economic environments shape promotional responsiveness in Azerbaijan and Poland. The interviews also allow respondents to explain behavioural changes such as increased price sensitivity, stockpiling behaviour, impulse purchasing, or promotional fatigue in their own words, thereby generating richer contextual understanding that cannot be achieved through surveys alone.

In line with mixed-methods research design, qualitative interviews were used to complement and contextualize quantitative findings, offering nuanced insights into the motivations, emotions, and reasoning processes that shape consumer decision-making. This approach was especially valuable because pandemic-related behavioural changes were complex, multidimensional, and deeply influenced by personal circumstances, cultural norms, and market conditions.

Semi-structured in-depth interviews were therefore selected as the qualitative instrument,

allowing participants to articulate their experiences freely while still ensuring comparability across cases.

Data Collection Procedure

A total of twelve semi-structured in-depth interviews were conducted between January 2023 and February 2025, consisting of six respondents from Azerbaijan and six respondents from Poland. Participants were selected using purposive sampling to ensure the inclusion of individuals capable of providing relevant and experience-based insights into purchasing behaviour and attitudes toward sales promotions during and after COVID-19. The purposive sampling technique was considered appropriate for the qualitative phase of the study because the semi-structured interviews required respondents who possessed relevant knowledge and purchasing experiences aligned with the objectives of the research (Jovanka & Putri, 2024; Sookaromdee & Wiwanitkit, 2022). The sampling approach also supported the comparative and cross-cultural nature of the dissertation by including respondents from both Poland and Azerbaijan, while reflecting variation in demographic and socio-economic characteristics relevant to consumer behaviour. Since the qualitative phase aimed to obtain detailed and context-specific insights rather than statistical representation, purposive sampling was considered suitable for identifying participants capable of providing rich and meaningful information. The interviews were conducted through Microsoft Teams, Google Meet, and in-person meetings to ensure accessibility, flexibility, and convenience for participants across different geographical contexts.

Interviews lasted between 30 - 45 minutes and followed a conversational style, allowing participants to express experiences naturally while ensuring that all thematic areas were covered. All interviews were audio-recorded with participants' consent and transcribed verbatim. Interviewees' identities were anonymized to ensure confidentiality and adherence to ethical research principles.

Given the bilingual context, Azerbaijani interviews were conducted in the participants' native language, whereas Polish interviews were conducted in English. All responses were translated into English for analysis, ensuring semantic accuracy while preserving original meaning.

Methodological Approach

The qualitative interview instrument was developed to explore how individuals described and interpreted their purchasing behaviour and use of promotional offers during the pandemic and

post-pandemic periods. The design focused on ensuring clarity, consistency, and comparability across all participants while allowing enough flexibility for respondents to elaborate on their personal experiences.

A semi-structured interview format was adopted to balance structure with depth. While all participants were asked the same core questions in a predetermined order, the interviewers were free to probe further depending on the interviewee's responses. This ensured that comparable data could be collected across all interviews while still capturing rich, context-specific insights into consumer behaviour and promotional decision-making.

The interview instrument followed a two-phase temporal structure. Questions were separated into a pandemic phase and a post-pandemic phase, allowing participants to reflect on their behaviours sequentially over time. This structure mirrored the comparative logic of the broader research design, making it possible to examine how promotional responsiveness, purchasing habits, and decision-making criteria evolved as market and social conditions shifted.

Cross-cultural comparability was ensured by using an identical interview guide for Azerbaijani and Polish respondents. This made it possible to systematically explore cultural and socio-economic contrasts in promotional preferences and behavioural adjustments between the two national groups. Asking participants to reflect on specific product categories, such as daily goods, electronics, fashion, home appliances, and health and wellness products, also helped illuminate differences across consumption contexts rather than general attitudes alone.

The design of the instrument was closely aligned with the quantitative component of the study. Several interview questions were intentionally crafted to correspond to concepts tested in the quantitative hypotheses, including the perceived attractiveness of promotional deals, changes in promotional sensitivity, and the relationship between promotions and impulse purchasing. This allowed the qualitative findings to deepen and contextualize patterns observed in the statistical results.

Purpose

The qualitative research component aims to generate rich, contextualized insights into how consumers interpret, experience, and respond to sales promotions during and after the COVID-19 pandemic. While the quantitative survey measures the magnitude and direction of behavioural change, the qualitative interviews deepen the understanding of *why* these changes occur and *how* consumers make sense of evolving promotional practices. Through in-depth,

semi-structured interviews, the study explores subjective meanings, emotional drivers, cultural influences, and situational factors that cannot be captured through numerical data alone.

The qualitative instrument is designed to:

- **Illuminate the processes behind behavioural change**, uncovering motivations, habits, and thought patterns shaping promotional responsiveness in both periods.
- **Provide explanatory depth for hypothesis testing**, offering interpretive evidence that complements statistical outcomes.
- **Enable cross-cultural comparison**, revealing how Azerbaijani and Polish consumers differ in perceptions of value, risk, and promotion-related decision-making.
- **Identify emerging themes and long-term behavioural adjustments**, supporting theory development on promotional effectiveness in post-pandemic contexts.

The interview guide contained several types of questions, each serving a distinct methodological function. The following table 11 summarizes question types and their intended purposes.

Table 11: Types of Survey Questions and Research Purposes

Question Type	Description	Purpose
Experiential Questions	Asked participants to describe their purchasing habits, feelings, and decisions during the pandemic and post-pandemic periods.	Explored lived experiences, emotional responses, and personal interpretations of promotional influences.
Behavioural Questions	Requested examples of actions, such as specific purchases or use of promotions.	Provided concrete evidence of consumer behaviour and allowed verification of stated attitudes.
Comparative Questions	Asked participants to contrast pandemic and post-pandemic habits and motivations.	Identified changes over time and helped understand persistence or decline of promotional responsiveness.

Category-Specific Questions	Focused on product categories (e.g., daily goods, electronics, fashion).	Revealed differences in promotional preferences across product types and cultural contexts.
Demographic Questions	Gathered background information such as age, occupation, and income.	Helped interpret patterns in relation to socio-economic and cultural variables.

Source: Author's elaboration

Alignment with Thematic Analysis (Braun & Clarke, 2006/2023)

The qualitative instrument was intentionally designed to align with Thematic Analysis, which served as the analytical framework for interpreting the interview data. The alignment can be summarized through several key principles:

- **Clarity of data segments:** The temporal separation of pandemic and post-pandemic questions created structured data segments that supported coding for change, continuity, and contrast which are core elements in thematic pattern development.
- **Rich, experiential data:** The open-ended questions encouraged narrative responses, allowing themes to emerge organically through participants' descriptions of behaviour, motivation, and emotional drivers.
- **Cross-cultural comparability:** Using identical question sets across Azerbaijani and Polish participants enabled the analysis of shared and divergent themes across cultural contexts, consistent with Braun & Clarke's emphasis on patterned meaning across groups.
- **Compatibility with inductive and deductive coding:** Certain questions were directly linked to quantitative constructs (promotional sensitivity, attractiveness of deals), supporting deductive coding, while others allowed for unexpected insights, supporting inductive exploration.
- **Support for theme development:** The structure of the instrument enabled systematic coding across product categories, promotional deal types, and behavioural responses, which later informed higher-level themes such as value-seeking behaviour, promotional dependency, shift in purchasing channels, and culturally shaped deal preferences.

5.3 Objectives, Research Questions and Hypotheses

This section presents the research objectives, research questions, and hypotheses that guide the empirical analysis of the study. These elements provide the foundation for examining how consumer responses to sales promotions changed during and after the COVID-19 pandemic, as well as for comparing promotional responsiveness between Azerbaijani and Polish consumers. Together, they establish a clear framework for the subsequent quantitative and qualitative analyses conducted in the dissertation.

Methodological and Terminological Clarification

The empirical part of this dissertation is based on a non-experimental mixed-method research design, combining survey questionnaires and semi-structured interviews conducted among respondents from Azerbaijan and Poland. Therefore, the study does not aim to establish causal effects in the strict experimental sense. Instead, it examines Azerbaijani and Polish respondents' evaluations, perceptions, declarations, and self-reported behavioural tendencies related to sales promotions during the pandemic and post-pandemic periods.

In this methodological context, terms such as “influence,” “impact,” “effect,” and “effectiveness,” where they appear in the research questions, objectives, hypotheses, results, or discussion, should be interpreted in a limited and non-causal sense. These terms refer to respondents' perceived relevance of sales promotions, declared attractiveness of promotional deals, self-reported behavioural responses, and statistically observed relationships or differences between variables. They should not be understood as evidence of direct causal influence.

Similarly, the term “consumer buying behaviour” in this dissertation refers primarily to respondents' declared and self-reported buying-related tendencies, including perceived sensitivity to promotional frequency, reported promotional exposure, declared impulse purchasing, stockpiling tendencies, product experimentation, and preferences for selected promotional deal types. Since these behaviours were measured through respondents' survey and interview responses, the findings should be interpreted as perceived and reported behavioural tendencies rather than directly observed purchasing behaviour.

Consequently, the research questions, objectives, and hypotheses are understood as examining how respondents evaluated selected sales promotion deals, how they perceived changes in their attractiveness from the pandemic to the post-pandemic period, and how these evaluations were associated with self-reported behavioural tendencies. Accordingly, the statistical analyses used

in this dissertation should be understood as identifying patterns, differences, associations, and group structures within the respondents' answers, rather than as estimating causal effects. The confirmation or rejection of hypotheses therefore indicates the presence or absence of statistically significant associations, differences, or perceived changes within the collected data, rather than proof of causal effects.

Research Objectives

This study aims to systematically examine how consumer responses to sales promotions evolved during the COVID-19 pandemic and how these responses persist or change in the post-pandemic period. By integrating a temporal and cross-cultural perspective, the research seeks to evaluate the effectiveness of different promotional strategies, identify behavioural and perceptual shifts over time, and compare promotional responsiveness between Azerbaijani and Polish consumers.

The specific objectives of the study are to:

1. **Examine changes in consumer perceptions and buying behaviour toward sales promotions during the pandemic and in the post-pandemic period.**

This objective conceptualizes consumer perceptions and buying behaviour as consumers' evaluations and behavioural responsiveness toward promotional activities across changing market conditions. It will be examined through cross-period Likert-scale comparisons and comparative statistical analysis of behavioural and attitudinal indicators.

2. **Determine how the effectiveness of different types of sales promotions (price discounts, bundling, Buy One Get One Free, coupons or vouchers, loyalty programs, and free trial or demo offers) changed from the pandemic to the post-pandemic period.**

Promotional effectiveness is defined as the extent to which different promotional mechanisms influence purchasing behaviour and perceived promotional attractiveness. This objective will be measured through comparative evaluation of promotional attractiveness ratings and cross-period analysis of consumers' responses toward different promotional techniques.

3. **Assess changes in consumers' sensitivity to the frequency of sales promotions between the pandemic and post-pandemic periods.**

Consumers' sensitivity to promotional frequency refers to the extent to which repeated exposure to promotional campaigns, discounts, and promotional offers influences

consumers' purchasing decisions, promotional responsiveness, and evaluations of promotional attractiveness over time. This objective will be examined through Likert-scale comparisons and comparative statistical analysis of consumers' reactions toward frequent promotional exposure across the pandemic and post-pandemic periods.

4. Analyze the evolution of the relationship between promotional exposure and impulse purchasing behaviour across the two periods.

Promotional exposure refers to the degree to which consumers encounter promotional stimuli through sales promotion activities such as discounts, bundling offers, BOGO campaigns, loyalty incentives, and coupons across retail and digital purchasing environments. Impulse purchasing behaviour refers to spontaneous and unplanned purchasing decisions triggered by perceived urgency, promotional attractiveness, and value-oriented incentives rather than deliberate purchasing planning. This objective will be measured through correlation analysis and comparative cross-period evaluation of promotional exposure and impulse purchasing indicators.

5. Identify differences between Azerbaijani and Polish consumers in their preferred promotional deal types across product categories.

Preferred promotional deal types are defined as consumers' relative preferences toward specific promotional mechanisms within different product categories. This objective will be examined through Pearson chi-square analysis and cross-cultural comparison of category-based promotional preference distributions.

6. Compare Azerbaijani and Polish consumers in terms of their behavioural responses to sales promotions during and after the pandemic period.

Behavioural responses to sales promotions refer to consumers' purchasing reactions and promotional engagement patterns across changing market conditions. This objective will be measured through comparative group analysis using Mann–Whitney U tests and cross-cultural evaluation of behavioural response indicators.

Research Questions

The research aims to answer the following research questions:

7. To what extent did consumers' evaluations of the attractiveness of sales promotions differ between the pandemic and post-pandemic periods?
 - g) To what extent did consumers' evaluations of the attractiveness of price discount deals differ between the pandemic and post-pandemic periods?

- h) To what extent did consumers' evaluations of the attractiveness of product bundling deals differ between the pandemic and post-pandemic periods?
 - i) To what extent did consumers' evaluations of the attractiveness of Buy One Get One Free deals differ between the pandemic and post-pandemic periods?
 - j) To what extent did consumers' evaluations of the attractiveness of coupon or voucher deals differ between the pandemic and post-pandemic periods?
 - k) To what extent did consumers' evaluations of the attractiveness of loyalty deals differ between the pandemic and post-pandemic periods?
 - l) To what extent did consumers' evaluations of the attractiveness of free trial or demo deals differ between the pandemic and post-pandemic periods?
8. How do changes in the perceived attractiveness of promotional deals relate to changes in consumer behavioural tendencies from the pandemic to the post-pandemic period?
 9. To what extent did consumers' sensitivity to promotional frequency change between the pandemic and post-pandemic periods?
 10. How did the relationship between promotional exposure and impulse purchasing evolve from the pandemic to the post-pandemic period?
 11. To what extent do Azerbaijani and Polish consumers differ in their behavioural responses to promotions from the pandemic to the post-pandemic period?
 12. How do Azerbaijani and Polish consumers differ in their preferred types of promotional deals across product categories?

Hypothesis

The following hypotheses are included to the dissertation:

H1: Consumers' evaluations of the attractiveness of sales promotions differed significantly between the pandemic and post-pandemic periods.

This hypothesis examines whether consumers' evaluations of the attractiveness of sales promotions differed between the pandemic and post-pandemic periods. It is measured by comparing respondents' attractiveness evaluations of selected promotional deal types across the two periods, including price discounts, product bundling, Buy One Get One Free, coupons or vouchers, loyalty deals, and free trial or demo offers. The purpose is to understand whether sales promotions as a general category were evaluated differently across the pandemic and post-pandemic periods. H1a: Consumers' evaluations of the attractiveness of *price discount* deals differed significantly between the pandemic and post-pandemic periods.

- H1b: Consumers' evaluations of the attractiveness of product *bundling* deals differed significantly between the pandemic and post-pandemic periods.
- H1c: Consumers' evaluations of the attractiveness of *Buy One Get One Free* deals differed significantly between the pandemic and post-pandemic periods.
- H1d: Consumers' evaluations of the attractiveness of *coupon or voucher* deals differed significantly between the pandemic and post-pandemic periods.
- H1e: Consumers' evaluations of the attractiveness of *loyalty* deals differed significantly between the pandemic and post-pandemic periods.
- H1f: Consumers' evaluations of the attractiveness of *free trial or demo* deals differed significantly between the pandemic and post-pandemic periods.

The sub-hypotheses H1a–H1f specify the individual promotional deal types included under H1. They allow the study to examine whether different promotional tools were evaluated differently across the pandemic and post-pandemic periods, rather than treating sales promotions as one uniform category.

H2: Changes in the perceived attractiveness of promotional deals from the pandemic to the post-pandemic period are positively associated with changes in consumers' promotional buying behaviours (e.g., impulse purchasing, stockpiling, or product experimentation).

This hypothesis examines whether changes in respondents' perceived attractiveness of promotional deals were associated with changes in their promotion-related buying behaviours from the pandemic to the post-pandemic period. In this study, perceived attractiveness refers to how respondents evaluated the attractiveness of different promotional deal types during both periods. It was measured through survey items asking respondents to rate the attractiveness of selected promotional deals, such as price discounts, product bundling, Buy One Get One Free, coupons or vouchers, loyalty deals, and free trial or demo offers, separately for the pandemic and post-pandemic periods. Promotional buying behaviours were measured through agree–disagree scale statements related to respondents' buying activities, including “*buying more products than one needs*,” “*tendency to buy products that come with promotional deals*,” “*trying a new product because of sales promotions*,” and “*stocking up on products in order to save money*.” Therefore, H2 tests whether changes in respondents' attractiveness ratings of promotional deals were statistically associated with changes in these self-reported promotional buying behaviours across the two periods.

H3: Consumers' sensitivity to the frequency of promotions has decreased in the post-pandemic period compared to the pandemic period.

This hypothesis examines whether respondents became less sensitive to the frequency of sales promotions in the post-pandemic period compared to the pandemic period. In this study, sensitivity to promotional frequency refers to how respondents reacted to the repeated or frequent appearance of promotional offers in their shopping environment. It was measured through survey items asking respondents to evaluate their sensitivity to the frequency of promotions during the pandemic and post-pandemic periods. These items captured whether frequent promotions were noticed, considered relevant, or connected with respondents' buying decisions in each period. Therefore, H3 tests whether respondents' declared sensitivity to promotional frequency decreased after the pandemic compared to the pandemic period.

H4. The positive relationship between promotional exposure and impulse purchasing was stronger during the pandemic than in the post-pandemic period.

This hypothesis examines whether promotional exposure was more strongly associated with impulse purchasing during the pandemic than in the post-pandemic period. In the survey, these two variables were measured through the following agree–disagree scale statements: promotional exposure was measured through *“I often visit stores (e-stores) that have various sales promotions offers,”* while impulse purchasing was measured through *“Promotional deals encourage me to buy products more than I need.”* Respondents answered these statements for both the pandemic and post-pandemic periods. Therefore, H4 tests whether the relationship between promotional exposure and impulse purchasing was stronger during the pandemic period than after the pandemic.

H5: Cross-cultural factors significantly influence the nature and intensity of consumer behavioural responses to promotional offers across the pandemic and post-pandemic periods.

This hypothesis examines whether Azerbaijani and Polish consumers differed in their behavioural responses to promotional offers. It focuses on whether national and cultural context was related to how consumers responded to promotions during and after the pandemic.

- *H5a: There is a significant difference between Azerbaijani and Polish consumers in their behavioural responses to promotional offers during and after the pandemic.*

This sub-hypothesis examines whether Azerbaijani and Polish consumers differed significantly in their promotion-related behaviours. It is measured by comparing the two national groups across behavioural indicators such as purchasing promoted products, visiting stores or e-stores with promotional offers, impulse purchasing, stockpiling, trying new products, and buying more than initially planned.

- *H5b: Azerbaijani consumers demonstrate stronger behavioural responsiveness to promotional deals (e.g., higher impulse purchasing and stockpiling) than Polish consumers during both periods.*

This sub-hypothesis examines the direction of cross-cultural responsiveness. It tests whether Azerbaijani consumers showed stronger promotion-related behavioural responses than Polish consumers during the pandemic and post-pandemic periods. It is measured by comparing the level of selected promotion-related behaviours between Azerbaijani and Polish respondents.

H6: Azerbaijani and Polish consumers differ significantly in their preferences for specific types of promotional deals across various product categories.

This hypothesis examines whether Azerbaijani and Polish consumers differed in their preferred promotional deal types across product categories. It focuses on whether promotional preferences were shaped by national context and product category.

- *H6a: There is a significant difference between Azerbaijani and Polish consumers in their preferred promotional deal types (e.g., discounts, coupons, loyalty programs, bundling).*

This sub-hypothesis examines whether Azerbaijani and Polish consumers differed in their preferred types of promotional deals. It is measured by comparing the preferred promotional tools reported by respondents from both countries across selected product categories.

- *H6b: Azerbaijani consumers show a stronger preference for volume and quantity maximization promotions (Buy One Get One Free and Product Bundling) than Polish consumers.*

This sub-hypothesis examines whether Azerbaijani consumers demonstrate stronger preferences for volume and quantity maximization promotions (e.g., buy one get one free deals and product bundling) than Polish consumers. It is assessed by comparing preferences for volume and quantity maximization promotional deals across selected product categories between the two national groups.

To ensure conceptual clarity and methodological rigor, this study explicitly aligns each research question with its corresponding hypotheses and analytical purpose. Although the research questions define the substantive scope of the investigation, the hypotheses translate these questions into empirically testable statements that guide the selection of analytical procedures. Presenting this alignment within the research methodology chapter reinforces the logical continuity between the study's conceptual foundations and its empirical execution.

The Table 12 systematically maps each research question to its associated hypothesis set and specifies the analytical purpose pursued in relation to each question. This structure avoids redundancy with the introductory chapter while making explicit how each research question is operationalized within the methodological framework. By doing so, the study ensures transparency in hypothesis testing and provides a clear methodological pathway for addressing the stated research objectives.

Table 12: Alignment of Research Purposes, Questions, and Hypotheses

Research Question(s)	Hypotheses	Purpose
RQ1, RQ1a, RQ1b, RQ1c, RQ1d, RQ1e, RQ1f	H1, H1a, H1b, H1c, H1d, H1e, H1f	To analyze whether consumers' evaluations of the attractiveness of sales promotions, including price discounts, product bundling, Buy One Get One Free, coupons or vouchers, loyalty deals, and free trial or demo deals, differed between the pandemic and post-pandemic periods.
RQ2	H2	To analyze the relationship between changes in the perceived attractiveness of promotional deals and changes in consumer behavioural tendencies from the pandemic to the post-pandemic period.
RQ3	H3	To analyze changes in consumers' sensitivity to promotional frequency between the pandemic and post-pandemic periods.
RQ4	H4	To analyze how the relationship between promotional exposure and impulse purchasing evolved from the pandemic to the post-pandemic period.

RQ5	H5, H5a, H5b	To analyze differences between Azerbaijani and Polish consumers in their behavioural responses to sales promotions during and after the pandemic period.
RQ6	H6, H6a, H6b	To analyze differences between Azerbaijani and Polish consumers in their preferred promotional deal types across product categories.

Source: Author's elaboration

6. Results and Findings

Before presenting the findings, it should be emphasized that the results in this chapter are interpreted in accordance with the methodological and terminological clarification provided in Chapter 5. Since the study is based on survey questionnaires and semi-structured interviews, the findings are discussed as Azerbaijani and Polish respondents' evaluations, perceptions, declarations, and self-reported behavioural tendencies. Therefore, the results indicate perceived changes, statistically observed associations, and group differences rather than direct causal effects of sales promotions on consumer buying behaviour.

6.1 Qualitative Results

This section presents the qualitative findings derived from twelve in-depth interviews conducted with Azerbaijani and Polish respondents, which were analyzed using the principles of Reflexive Thematic Analysis (RTA) as defined by Braun and Clarke (2023). Thematic analysis is a systematic yet flexible method used to identify, analyze, and interpret patterns of shared meaning, or "themes," across a qualitative dataset. Unlike purely descriptive methods, the approach developed by Braun and Clarke (2006, 2023) emphasizes the active role of the researcher in constructing these themes, moving beyond the surface-level words of the participants to uncover the underlying psychological and cultural drivers of their behaviour. This focus on the researcher as an active instrument in the analytical process is further supported by (Byrne, 2022), who demonstrates how reflexive thematic analysis allows for a deeper, more transparent engagement with qualitative data.

This method is particularly vital for the current research because it provides the interpretive depth necessary to explain the "why" behind consumer shifts that quantitative data might only identify as "what." By employing this framework, the study captures the nuanced transition from pandemic-induced emotional responses to post-pandemic rationalized habits, allowing for a rich comparison between the Azerbaijani and Polish cultural contexts. The utility of this approach in examining pandemic-related behavioural shifts is exemplified by Fuller and Huseth-Zosel (2021), who applied Braun and Clarke's method to investigate how individual lifestyles and routines were reshaped by the global crisis.

The analysis generated three main themes that presents how consumers' purchasing behaviours, promotional sensitivities, and culturally grounded responses evolved from the pandemic to the post-pandemic period across Azerbaijan and Poland. Theme 1 examines the evolution of purchasing behaviour across the pandemic phases, tracing the initial disruption and early habit

formation during the pandemic period, the accelerated transition toward online purchasing, and the extent to which these behaviours persisted or stabilized in post-pandemic period. Theme 2 explores the evolving role of promotional offers, documenting how promotions functioned during the pandemic as economic support mechanisms and, within the Azerbaijani context, as situational triggers that ultimately led to a defensive shift toward promotional filtering and necessity-based decision-making in the post-pandemic period. Finally, Theme 3 assesses the cross-cultural differences in promotion sensitivity, revealing that Azerbaijani consumers demonstrated a heightened skepticism and a clearer post-pandemic shift toward controlled and necessity-based purchasing. While they described situational and emotion-linked reactions during the pandemic, their behavioural response is now characterized by promotional avoidance to maintain budget control. In contrast, Polish consumers maintained a 'budgeting-oriented' approach, treating promotions as practical tools integrated into planned purchasing strategies.

6.1.1 Theme 1: Evolution of Purchasing Behaviour Across the Pandemic Phases

Theme 1 focuses on the evolution of purchasing behaviour across different phases of the COVID-19 pandemic. This theme is organised around three interrelated dimensions: pandemic period behavioural change and early habit formation, transition to online purchasing, and post-pandemic period behavioural persistence and change. Together, these dimensions provide a structured basis for examining how consumers in Azerbaijan and Poland experienced and interpreted changes in their purchasing behaviour over time.

Pandemic period behavioural change and early habit formation

Across both countries, the pandemic acted as a catalyst that significantly reshaped shopping routines and priorities. Azerbaijani respondents frequently described the pandemic as a period of financial caution, emotional stress, and heightened uncertainty. Many shifted toward stockpiling essential goods and prioritizing self-care items; however, while some participants described spontaneous purchases triggered by promotional cues, this was largely an emotional coping mechanism that did not translate into a general increase in promotional responsiveness. Emotional coping mechanisms were commonly referenced. For example, one Azerbaijani participant described purchasing unnecessary items simply to “feel better” due to isolation and lack of social stimulation. This reflects statements such as Respondent 1 from Azerbaijan, who openly admitted buying items she did not need purely to improve her mood during a time of psychological strain, explaining: “During the pandemic because of only promotions, I bought products that I did not really need just to feel better.” Similar coping-motivated purchases were also evident in Respondent 5’s account of stockpiling discounted essentials for security during

lockdowns. Respondent 5 from Azerbaijan stated: “I remember buying a discounted package of rice, oil, and flour from a supermarket. It was cheaper as a bundle, and since we were cooking at home all the time, it made sense to stock up.” Respondent 3 from Azerbaijan also associated promotions with practical household purchasing, particularly through “1+1” offers and discounts on daily necessities and health-related products. This aligns with literature linking crisis periods to compensatory consumption.

Polish consumers, in contrast, described the pandemic as a moment of tightening budgets and minimizing unnecessary shopping trips. Several respondents reported creating weekly shopping lists, avoiding frequent store visits, and prioritizing efficiency. For example, Respondent 2 from Poland explained: “I started making grocery lists, so I could do all of my shopping for a week in one go, because of long lines in the grocery stores.” Respondent 5 from Poland similarly described relying on discounted pasta and canned food because promotions helped him manage a limited student budget during lockdowns. Rather than emotional coping purchases, Polish participants emphasized reduced spending, functional buying, and avoidance of impulsive behaviours. Polish participants tended to treat promotions as tools for saving rather than diversion or emotional relief. This pattern appears clearly in Respondent 2 from Poland, who stated that she bought only discounted products that she already needed, explaining: “I only buy things on promos when I actually need them.” Respondent 3 from Poland, who emphasized buying “necessary things” and avoiding extra spending, further explained that she preferred buying products “which I know going to last” and avoided unnecessary purchases during the pandemic.

Transition to Online Purchasing

The shift to online shopping was a dominant pattern across interviews, though with variation in motivation. Azerbaijani consumers primarily adopted online shopping for safety and convenience, especially to protect family members and avoid crowded environments. They reported purchasing groceries, electronics, and self-care products online while still occasionally visiting in-store locations for psychological relief or product inspection. Respondent 6 from Azerbaijan specifically mentioned choosing online shopping to avoid exposing his parents to health risks, explaining: “Mostly online. In Azerbaijan, many people stayed home with family, and I didn’t want to put my parents at risk.” Similarly, Respondent 4 from Azerbaijan explained that online shopping became preferable because it was more convenient and provided better access to discounts on electronics and technological products. Meanwhile, Respondent 1 from Azerbaijan noted ordering fast food and self-care products online even when she occasionally

visited stores to “get out of the house,” explaining that she still preferred online ordering because it was more convenient and emotionally comforting during lockdown periods.

Polish respondents also increased online shopping, but often framed it as a practical adaptation to long queues, limited mobility, and the desire to avoid crowded stores. Supporting this finding, Respondent 2 from Poland explained that “the queues to even enter the stores were super long and I preferred to do my shopping in the comfort of my home.” Respondent 4 from Poland similarly described online shopping as a more convenient and less stressful alternative during the pandemic, explaining that stores felt stressful because of masks, queues, and restrictions. Unlike Azerbaijani participants, Polish consumers were more cautious about categories such as clothing, often expressing discomfort with buying apparel online due to fit uncertainties. For instance, Respondent 1 from Poland emphasized her strong preference for checking clothes physically because online purchases made sizing difficult, stating that “you never know if the size is going to fit properly.” Respondent 2 from Poland similarly relied on online grocery services but maintained reservations about buying apparel online.

Post Pandemic period behavioural persistence and change

After the pandemic, both groups displayed a combination of persistent and fading habits. Online shopping remained a dominant behaviour in both countries, but motivations shifted. Azerbaijani consumers cited time constraints and habit formation as reasons for continued online use, whereas Polish respondents highlighted convenience, price comparison capabilities, and familiarity with digital platforms. This distinction is supported by Respondent 1 from Azerbaijan, who continued shopping online due to lack of time and explained that online shopping remained preferable because it was “more convenient and time-saving.” Respondent 6 described maintaining online habits because they were already established, stating: “Still I prefer buying things online, which is convenient and price saving.” Respondent 4 from Azerbaijan similarly explained that online shopping continued after the pandemic because internet prices remained better than physical store prices and allowed additional savings. On the Polish side, Respondent 4 explained that online shopping offered better price comparisons, stating: “I compare prices more and check multiple shops before buying.” Respondent 6 from Poland preferred online shopping for convenience and efficiency, explaining that it remained preferable because it was “faster, easier, and more convenient.”

However, the emotional drivers that previously shaped purchases among Azerbaijani participants weakened considerably. Several noted that promotional influence decreased once

social life resumed and financial pressure eased. Respondent 1 from Azerbaijan explicitly stated she no longer buys unnecessary promotional items unless needed, demonstrating this decline, explaining: “If I need it, I buy it; if not, I do not buy it.” Respondent 6 from Azerbaijan similarly explained that discounts became influential only when products were already planned for purchase and considered necessary. In contrast, Polish participants tended to maintain similar purchase logic before and after the pandemic, with most describing their habits as largely unchanged, apart from increased dependence on digital channels. Respondent 3 from Poland, for example, noted that her purchasing habits “stayed the same,” while Respondent 2 indicated continued reliance on structured budgeting and planned purchasing.

6.1.2 Theme 2: The Evolving Role of Promotional Offers in Decision-Making

Theme 2 focuses on the evolving role of promotional offers in consumers’ decision-making during the pandemic and post-pandemic periods. This theme is organized around three interrelated dimensions: Pandemic: Promotions as Economic and Psychological Stimuli, Post-Pandemic: Declining Emotional Influence and Increasing Rationality, and Product Category-Specific Promotional Tendencies. Together, these dimensions provide a structured basis for examining how Azerbaijani and Polish consumers interpreted, evaluated, and responded to promotional offers across different time periods and product categories.

Pandemic: Promotions as Economic and Psychological Stimuli

Promotional offers played distinct roles during the pandemic. Azerbaijani respondents frequently described promotions as triggers for unplanned purchases, particularly during moments of emotional vulnerability or boredom. Many participants admitted buying items they did not strictly need, often explaining this through emotional reward or fear of scarcity. Offers such as “buy one get one free,” bundle deals, and price discounts were especially appealing, reflecting both economic and psychological motivations. Respondent 1 from Azerbaijan illustrated this clearly when she admitted buying promotional products without need, explaining: “During the pandemic because of only promotions, I bought products that I did not really need just to feel better.” Respondent 3 from Azerbaijan used 1+1 offers on daily goods and health products as a primary purchasing incentive, explaining: “1+1 offers and discounts were very useful for daily products and health items during the pandemic.” Respondent 5 from Azerbaijan also associated promotional offers with stockpiling behaviour, stating: “It was cheaper as a bundle, and since we were cooking at home all the time, it made sense to stock up.” Respondent 4 from Azerbaijan similarly explained that discounts on electronics and

gaming-related products became attractive during lockdown periods, stating: “Discounts on electronics helped me save money for accessories and gaming products during lockdown.”

Polish respondents also used promotions, but in a more structured and utilitarian manner. Their decisions were grounded in saving money and stockpiling durable goods during periods of uncertainty. Promotions did not typically drive impulse buying in this group. Instead, promotions were incorporated into pre-planned shopping strategies. Polish consumers were more likely to choose a discounted version of a product they already intended to buy. This was reflected in Respondent 2 from Poland’s practice of buying only items she already needed and then selecting whichever brand was on promotion, explaining: “First I wondered about what I needed and then I found which one was on promotional offer and bought that one.” Respondent 5 from Poland stockpiled pasta and canned food primarily because discounts allowed him to stretch a limited student budget, explaining: “Promotions helped me stay within a tiny budget during the pandemic.” Respondent 3 from Poland emphasized that promotional purchases were connected to practicality and necessity rather than emotional reward, stating: “I focused mostly on products that were useful and going to last.” Respondent 1 from Poland similarly explained that promotions were attractive only when they supported already planned purchases, stating: “I only looked at promotions when I already planned to buy the product.”

Post-Pandemic: Declining Emotional Influence and Increasing Rationality

In the post-pandemic period, Azerbaijani consumers reported a notable shift toward more rational and need-based purchasing. Many expressed that promotions no longer held the same emotional appeal and that they now evaluated necessity before responding to discounts. Several noted that they only purchase promotional offers when the product is already on their shopping list, mirroring the long-standing Polish pattern. Respondent 1 from Azerbaijan emphasized that promotional offers became less emotionally influential after the pandemic, explaining: “Before, promotions affected me emotionally, but now I think first whether I really need the product or not.” Respondent 6 noted that discounts only affect his decision when he had already planned to buy the item, stating: “Yes, but only if I already planned to buy the product. I do not buy something just because it is on sale.” Respondent 4 from Azerbaijan similarly explained that post-pandemic promotional decisions became more selective, particularly regarding electronics and technology-related products, explaining: “Now I pay attention only to real discounts that actually help me save money.” Respondent 5 from Azerbaijan also reported becoming increasingly cautious toward promotions after the pandemic, stating: “After the pandemic, I became more careful about unnecessary purchases and focused mostly on essentials.”

For Polish consumers, promotional behaviour remained relatively stable, although with increased price consciousness linked to rising living costs. Post-pandemic inflation in Poland contributed to a renewed focus on promotions across categories such as daily goods and electronics. However, similar to Azerbaijan, Polish respondents also set clearer boundaries, indicating they avoid promotions unless the product is genuinely needed. Respondent 4 from Poland described ongoing interest in genuine price drops, particularly cashback offers for electronics, explaining: “I compare prices more and check multiple shops before buying.” Respondent 2 maintained her practice of purchasing only necessary products despite ongoing promotional exposure, stating: “I still buy discounted products only when I actually need them.” Respondent 6 from Poland similarly explained that promotions remained useful mainly when they supported convenience and practical savings, stating: “Promotions are useful when they help me save time and money on products I already need.”

Product Category-Specific Promotional Tendencies

Daily products: Azerbaijani consumers frequently used price discounts and Buy One Get One Free (BOGO) promotions for everyday items, both before and after the pandemic. Respondent 3 from Azerbaijan mentioned using “1+1” offers for daily necessities, reflecting reliance on BOGO promotions. Polish respondents applied similar strategies, especially BOGO deals as part of weekly budgeting routines. For instance, Respondent 1 from Poland regularly used “1+1” and “1+2” promotions when shopping for food and household essentials.

Consumer electronics: In Azerbaijan, consumers tended to rely on voucher codes and seasonal price discounts, often applied during online purchases. Respondent 4 from Azerbaijan purchased a discounted mobile phone during the pandemic because the reduced price and extended warranty made the offer attractive. Polish respondents generally preferred more structured promotional mechanisms such as price discounts tied to large campaigns (e.g., Black Friday) or cashback incentives, which function similarly to price-adjustment promotions. Respondent 4 from Poland specifically noted using cashback when purchasing electronics after the pandemic.

Style & Fashion: Both Azerbaijani and Polish consumers showed a strong preference for price discounts in this category. Respondent 1 from Azerbaijan used fashion-related discounts frequently, both before and after the pandemic. In contrast, some Polish participants were less influenced by fashion promotions; for example, Respondent 3 from Poland rarely purchased

fashion items and did not engage with promotions due to personal values, illustrating lower promotional responsiveness in this category among some Polish respondents.

Home appliances: In both countries, home appliances were generally purchased only when necessary, with consumers using promotions opportunistically rather than proactively. Respondent 5 from Azerbaijan described relying on price discounts when purchasing appliances, while Respondent 4 from Poland mentioned using such deals when upgrading or replacing items. Neither group frequently used bundling, BOGO, coupons, loyalty, or free trials in this category, reflecting the high-involvement nature of these products.

Health & Wellness: Promotional engagement varied considerably among Azerbaijani consumers, with some using price discounts or BOGO offers (e.g., Respondent 3 citing “1+1” promotions), while others reported little to no use of sales promotions in this category. In Poland, respondents more consistently used promotions such as price discounts for supplements or loyalty deals associated with gym memberships. Respondent 6 from Poland described using promotional codes to purchase health-related products such as supplements.

Overall, while the pandemic heightened emotional awareness of promotions, the resulting behavioural patterns diverged. In Azerbaijan, this manifested as a defensive consumer stance characterized by increased skepticism and promotional avoidance, particularly for non-essential items. In contrast, Polish consumers approached promotions more economically and strategically, relying on budgeting discipline and structured engagement with discounts and loyalty benefits.

6.1.3 Theme 3: Cross-Cultural Differences in Promotion Sensitivity and Preferences

Theme 3 addresses the cross-cultural dimension of promotion sensitivity and promotional preferences by focusing on Azerbaijani and Polish consumers. The discussion is developed through two key analytical dimensions: Cultural Orientation and Promotion Responsiveness, and Persistence of Pandemic Habits Across Cultures. These dimensions allow the theme to consider how cultural context may shape consumers’ interpretation of promotional offers, their level of responsiveness to different promotional cues, and the continuity or adjustment of pandemic-related purchasing patterns over time.

Cultural Orientation and Promotion Responsiveness

The analysis suggests that Azerbaijani consumers display a more flexible, situational, and emotion-driven response to promotions, particularly under crisis conditions. While their

purchasing behaviours during the pandemic indicate an emotional awareness of promotional cues, this did not translate into higher general responsiveness. Instead, the findings suggest a defensive consumer stance where engagement was highly selective and often limited to immediate psychological needs. This is illustrated by Respondent 1 from Azerbaijan, who utilized promotions specifically for emotional coping during lows, and Respondent 3, who engaged with 1+1 deals as a survival mechanism rather than a general increase in promotional sensitivity.

Polish consumers, on the other hand, demonstrated a more stable, pragmatic approach to promotions. Their decision-making remained oriented toward long-term financial prudence, budgeting, and rational product evaluation. Even when using promotions, Polish respondents framed their choices around necessity and planned purchases. Respondent 2 from Poland explained that she only bought discounted products she already planned to purchase, while Respondent 3 maintained consistent, need-based purchasing habits despite promotional exposure.

These patterns reflect broader cultural distinctions. Azerbaijan's collectivist and uncertainty-sensitive orientation appears to foster increased consumer caution and skepticism during crises, leading to a deliberate filtering of promotional triggers. In contrast, Poland's more individualist and market-stable environment encourages a more consistent and structured engagement with promotions as a standard part of rational, value-based decision-making.

Persistence of Pandemic Habits Across Cultures

Azerbaijani participants described specific situational adjustments during the pandemic that established a long-term pattern of necessity-based shopping and promotional filtering. While their initial reactions were linked to emotional pressure, this stabilized into a controlled and skeptical approach in the post-pandemic period. Respondent 1 from Azerbaijan explicitly stated that discounts manipulate her far less now, which aligns with the high levels of promotional avoidance and the tendency to remain unaffected by deals observed in the quantitative results.

Polish consumers exhibited greater continuity. Pandemic-induced habits, especially online shopping and promotional monitoring, persisted into the post-pandemic period with little change. Their purchasing logic remained anchored in price discipline and economic rationality. Respondent 4 from Poland noted that online shopping remained his default method, while Respondent 2 continued to rely on price-to-quality assessments as she did before.

6.2 Quantitative Results

The analyzed variables were measured either on nominal or ordinal scale. Therefore, nonparametric statistical methods were used in the analysis. The differences between the pandemic and post-pandemic periods regarding ordinal-scale attractiveness evaluations and sensitivity to promotional frequency (hypothesis H1, H3) were analyzed using the Wilcoxon test. The relationships between variables measured on ordinal scale (hypothesis H2, H4) were analyzed with Spearman's rho correlation coefficients. The differences between groups of Azerbaijani and Polish consumers regarding ordinal variables (hypothesis H5) were verified with the use of Mann-Whitney U test. The differences between groups of Azerbaijani and Polish consumers regarding nominal variables (hypothesis H6) were verified with the use of Pearson's chi-squared test for independence. All statistically significant differences were depicted on figures. The analyses were performed with the use of IBM SPSS Statistics 30.0 software.

The hypothesis testing presented in this section should be interpreted within the limits of the non-experimental and self-reported research design. The confirmation or rejection of hypotheses indicates whether statistically significant differences, associations, or perceived changes were identified in the collected data. It should not be interpreted as proof of direct causal influence, but rather as evidence of relationships among respondents' evaluations of promotional deals, perceived attractiveness, and self-reported behavioural tendencies.

6.2.1 Demographic Profile and Key Decision-Making Factors of Respondents

The quantitative data were collected through an online questionnaire administered via Google Forms between mid-July 2024 and December 2025. The survey targeted respondents from two countries, Poland and Azerbaijan, resulting in a final sample of 300 respondents, consisting of 150 Azerbaijani and 150 Polish participants. Respondents were recruited through online distribution channels, including social media platforms and digital networks.

The questionnaire was designed using mandatory response settings within Google Forms, which ensured that participants could not submit incomplete questionnaires. Consequently, all respondents who initiated the survey completed it in full, and no responses were excluded during the data screening process. This approach contributed to the completeness and consistency of the dataset used for the quantitative analysis.

This section presents the demographic characteristics of the respondents, including age, gender, employment status, educational background, household income, frequency of shopping, and time spent on shopping. These descriptive indicators help to contextualize the composition of

the sample and support the interpretation of consumer behaviour patterns examined in later analyses.

In addition to demographic information, respondents also identified the key factors influencing their decision-making processes when evaluating and purchasing products or services. Including these factors offers further insight into the underlying motivations that shape consumer responses to promotional strategies.

Table 13 depicts the distribution of participants' age. Most participants were between 25 and 34 years old, forming the largest age category in both groups. This age range accounted for 56.7% of the Azerbaijani participants and 32% of the Polish participants.

Table 13: Participants' Age

	Group					
	Azerbaijani		Polish		Total	
Age	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Under 18	0	0.0	4	2.7	4	1.3
18-24	50	33.3	40	26.7	90	30.0
25-34	85	56.7	48	32.0	133	44.3
35-44	12	8.0	30	20.0	42	14.0
45-54	2	1.3	24	16.0	26	8.7
55 and older	1	0.7	4	2.7	5	1.7
Total	150	100	150	100	300	100

n – number of participants; % - group percentage

Source: Author's elaboration

The Polish sample showed a more balanced distribution across age groups such as 25–34, 35–44, and 45–54. Only four Polish participants were under 18, meaning that the data primarily reflects adults

Table 14: Participants' gender

	Group					
	Azerbaijani		Polish		Total	
Gender	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%

Female	100	66.7	84	56.0	184	61.3
Male	48	32.0	64	42.7	112	37.3
Non-binary	2	1.3	2	1.3	4	1.3
Total	150	100	150	100	300	100

n – number of participants; % - group percentage

Source: Author's elaboration

The gender distribution in Table 14 indicates a female-majority sample, with 66.7% of Azerbaijani participants and 56% of Polish participants identifying as female. Males comprised 32% and 42.7% of the Azerbaijani and Polish groups, respectively. A small number of participants (1.3% in each group) identified as non-binary. This imbalance suggests that female perspectives may be more prominently reflected in the finding.

Table 15: Participants' employment status

	Group					
	Azerbaijani		Polish		Total	
Employment status	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Employed. working 40+ hours per week	77	51.3	94	62.7	171	57.0
Employed. working 1-39 hours per week	31	20.7	26	17.3	57	19.0
Not employed. looking for work	25	16.7	18	12.0	43	14.3
Not employed. not looking for work	14	9.3	11	7.3	25	8.3
Retired	1	0.7	1	0.7	2	0.7
Disabled. not able to work	2	1.3	0	0.0	2	0.7
Total	150	100	150	100	300	100

n – number of participants; % - group percentage

Source: Author's elaboration

Based on Table 15, most participants were professionally active, particularly those working forty or more hours per week. This category included 51.3% of Azerbaijani participants and 62.7% of Polish participants. Employment patterns were similar overall, although a higher percentage of Polish participants worked full time. Unemployment and non employment were slightly more common in the Azerbaijani sample. Very few participants were retired or unable to work.

Table 16: Participants' level of education

	Group					
	Azerbaijani		Polish		Total	
Education	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
High school	31	20.7	43	28.7	74	24.7
Bachelor's degree	51	34.0	41	27.3	92	30.7
Master's degree	63	42.0	58	38.7	121	40.3
Doctorate degree	5	3.3	8	5.3	13	4.3
Total	150	100	150	100	300	100

n – number of participants; % - group percentage

Source: Author's elaboration

Table 16 illustrates the largest category consisted of participants with a master's degree, representing 42% of the Azerbaijani group and 38.7% of the Polish group. Bachelor's degree holders formed the next largest category. Only a small percentage held doctorate degrees. The Azerbaijani group contained slightly more individuals educated at the master's level, while the Polish group included a higher percentage of high school graduates. These characteristics suggest that consumer decisions in this sample may be shaped by higher educational backgrounds.

Table 17: Household's gross monthly income

	Group					
	Azerbaijani		Polish		Total	
Monthly income	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Below 500\$	32	21.3	14	9.3	46	15.3
500 - 999\$	30	20.0	12	8.0	42	14.0
1000 - 1999\$	39	26.0	32	21.3	71	23.7
2000 - 4999\$	19	12.7	45	30.0	64	21.3
5000\$ and above	9	6.0	12	8.0	21	7.0
Prefer not to say	21	14.0	35	23.3	56	18.7
Total	150	100	150	100	300	100

n – number of participants; % - group percentage

Source: Author's elaboration

Income distributions in Table 17 differed noticeably between the two groups. The Azerbaijani group most often reported monthly income in the range of 1000 to 1999 USD, with 26% selecting this category. The Polish group most frequently reported income in the range of 2000 to 4999 USD, selected by 30% of participants. Lower income ranges were more common in the Azerbaijani group. A considerable percentage in both groups chose not to disclose their income.

Table 18: Frequency of going shopping

	Group					
	Azerbaijani		Polish		Total	
Shopping	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Everyday	14	9.3	23	15.3	37	12.3
2-3 times in a week	48	32.0	84	56.0	132	44.0
Once in a week	31	20.7	28	18.7	59	19.7
2-3 times in a month	32	21.3	10	6.7	42	14.0
Once in a month	16	10.7	2	1.3	18	6.0
Less often	9	6.0	3	2.0	12	4.0
Total	150	100	150	100	300	100

n – number of participants; % - group percentage

Source: Author's elaboration

The most common shopping frequency in the sample was two to three times per week which is illustrated in Table 18. This was especially evident in the Polish group, where 56% selected this option, compared to 32% in the Azerbaijani group. The Azerbaijani participants showed more variation, with notable percentages reporting shopping once per month or two to three times per month. Everyday shopping was more common in the Polish sample.

Table 19: Time spent on shopping

	Group					
	Azerbaijani		Polish		Total	
Time spent on shopping	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Less than 1 hour	52	34.7	54	36.0	106	35.3

1-3 hours	78	52.0	77	51.3	155	51.7
4-6 hours	17	11.3	17	11.3	34	11.3
7-10 hours	2	1.3	2	1.3	4	1.3
More than 10 hours	1	0.7	0	0.0	1	0.3
Total	150	100	150	100	300	100

n – number of participants; % - group percentage

Source: Author's elaboration

According to Table 19, a majority of participants spent one to three hours per week shopping, with 52% of the Azerbaijani group and 51.3% of the Polish group reporting this range. Shorter shopping durations of less than one hour were also common in both groups. Only a very small percentage spent seven hours or more.

Table 20: Factors influencing participants' decision-making process when evaluating and purchasing products or services

	Group					
	Azerbaijani		Polish		Total	
Factors	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Price	114	76.0	133	88.7	247	82.3
Quality	111	74.0	115	76.7	226	75.3
Sale Promotions	59	39.3	102	68.0	161	53.7
Brand reputation	49	32.7	61	40.7	110	36.7
Service/support	24	16.0	17	11.3	41	13.7
Location	29	19.3	74	49.3	103	34.3
Product availability	35	23.3	56	37.3	91	30.3
Others	4	2.7	3	2.0	7	2.3

n – number of participants; % - group percentage

Note. Percentages do not sum up to 100%, because each participant could indicate more than one factor.

Source: Author's elaboration

In Table 20, Majority of participants indicated price and quality. Sale promotions was indicated by majority in the Polish group, but not in the Azerbaijani group.

Across the entire sample, price and quality were the most frequently selected factors influencing purchasing decisions. Price was chosen by 82.3% of participants and quality by 75.3%. Promotional offers were more influential among Polish participants, selected by 68%, compared to 39.3% in the Azerbaijani group. Location also played a larger role for Polish consumers, indicated by 49.3% of them, while only 19.3% of the Azerbaijani group selected this factor. Other factors such as brand reputation, service or support, and product availability showed moderate influence. Very few participants selected additional factors beyond the provided options. Overall, the results show that although consumers from both countries prioritize price and quality, Polish participants are more responsive to sale promotions and situational factors such as location.

6.2.2 Test of Hypotheses

6.2.2.1 Consumers' evaluations of the attractiveness of sales promotions during the pandemic and post-pandemic periods

Table 21 presents respondents' attractiveness ratings for price discount promotions during and after the COVID-19 pandemic for the total sample, as well as separately for Azerbaijani and Polish consumers. The table compares how consumers evaluated the attractiveness of price discounts across the two periods using categories ranging from "Very attractive" to "Very unattractive," including respondents who indicated that they had not seen such promotions or were unsure. The category "have not seen/not sure" on the table represents respondents who indicated in the previous section of the questionnaire that they had not seen this specific type of sales promotion or were unsure about it. Therefore, these respondents were excluded from evaluating the attractiveness of the promotional deal itself. However, for the purpose of maintaining the total sample size and presenting complete descriptive results, these responses were retained in the table under the category "have not seen/not sure"

The study utilized a Wilcoxon signed-rank test (Wilcoxon, 1945) to determine if there was a statistically significant shift in the attractiveness of price discounts between the two periods. Although descriptive differences were observed between the pandemic and post-pandemic periods, these changes were not statistically significant according to the Wilcoxon signed-rank test results. Specifically, the p-values for the total sample ($p = .100$), Azerbaijani consumers ($p = .478$), and Polish consumers ($p = .095$) all exceeded the standard significance threshold of 0.05. This indicates that the observed variations in respondents' attractiveness ratings for price

discounts could have occurred by chance and do not provide sufficient statistical evidence of a meaningful change between the two periods.

Table 21: Attractiveness ratings for price discounts regarding during and post-pandemic periods

		Pandemic period							
		during			after				
Group	Attractiveness	<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>Z</i>	<i>p</i>
Total Sample	Very attractive	35.5	64	21.3	28.8	50	16.7	-1.65	.100
	Attractive		115	38.3		126	42.0		
	Neutral		77	25.7		80	26.7		
	Unattractive		9	3.0		10	3.3		
	Very unattractive		5	1.7		4	1.3		
	have not seen/not sure		30	10.0		30	10.0		
	Total		300	100		300	100		
Azerbaijani	Very attractive	15.82	28	18.7	13.65	23	15.3	-0.71	.478
	Attractive		48	32.0		52	34.7		
	Neutral		40	26.7		41	27.3		
	Unattractive		7	4.7		8	5.3		
	Very unattractive		4	2.7		3	2.0		
	have not seen/not sure		23	15.3		23	15.3		
	Total		150	100		150	100		
Polish	Very attractive	20.33	36	24.0	15.00	27	18.0	-1.67	.095
	Attractive		67	44.7		74	49.3		
	Neutral		37	24.7		39	26		
	Unattractive		2	1.3		2	1.3		
	Very unattractive		1	0.7		1	0.7		

	have not seen/not sure		7	4.7		7	4.7		
	Total		150	100		150	100		

n – number of participants; % - group percentage; MR – mean rank; Z – Wilcoxon test; p – statistical

Note. Wilcoxon test is not based on frequency distributions. They are depicted for illustrative purposes only.

Source: Author's elaboration

While there was a slight descriptive dip in the "Very Attractive" category after the pandemic (falling from 21.3% to 16.7% total), the overall sentiment remained largely "Attractive" or "Neutral." Because the statistical test did not find a significant difference in the distribution of these ratings.

Hypothesis H1a proposed that price discount deals would have a significantly stronger influence on consumers' buying habits during the pandemic compared to the post-pandemic period. However, because the statistical analysis did not identify significant differences in attractiveness ratings between the two periods, there is insufficient empirical evidence to support the claim that price discounts had a greater impact during the pandemic. Therefore, Hypothesis H1a is rejected. The findings instead suggest that price discounts remained consistently attractive and continued to play an important role in influencing consumer purchasing behaviour even in the post-pandemic environment.

The data in Table 22 shows that product bundling displays an even higher level of stability than price discounts did.

The study applied the Wilcoxon signed-rank test to determine if the transition from the pandemic to the post-pandemic period changed the attractiveness of product bundling. The statistical results for the Total Sample ($p = .891$), the Azerbaijani group ($p = .727$), and the Polish group ($p = .871$) all show p -values significantly higher than the 0.05 threshold. In fact, these very high p -values (approaching 1.0) indicate almost no shift in consumer perception.

Table 22: Attractiveness ratings for product bundling deals regarding during and post-pandemic periods

	Pandemic period	
--	-----------------	--

		during			after				
Group	Attractiveness	<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>Z</i>	<i>p</i>
Total Sample	Very attractive	34.23	29	9.7	29.97	33	11.0	-0.14	.891
	Attractive		81	27.0		78	26.0		
	Neutral		73	24.3		68	22.7		
	Unattractive		29	9.7		35	11.7		
	Very unattractive		5	1.7		3	1.0		
	have not seen/not sure		83	27.7		83	27.7		
	Total		300	100		300	100		
Azerbaijani	Very attractive	13.46	15	10.0	12.5	17	11.3	-0.35	.727
	Attractive		38	25.3		36	24.0		
	Neutral		24	16.0		24	16.0		
	Unattractive		10	6.7		12	8.0		
	Very unattractive		3	2.0		1	0.7		
	have not seen/not sure		60	40.0		60	40.0		
	Total		150	100		150	100		
Polish	Very attractive	21.18	14	9.3	18.14	16	10.7	-0.16	.871
	Attractive		43	28.7		42	28.0		
	Neutral		49	32.7		44	29.3		
	Unattractive		19	12.7		23	15.3		
	Very unattractive		2	1.3		2	1.3		
	have not seen/not sure		23	15.3		23	15.3		
	Total		150	100		150	100		

n – number of participants; % - group percentage; *MR* – mean rank; *Z* – Wilcoxon test; *p* – statistical

Note. Wilcoxon test is not based on frequency distributions. They are depicted for illustrative purposes only.

Source: Author's elaboration

From a descriptive standpoint, the preference for bundling remained remarkably static. In the total sample, the percentage of respondents who found these deals "very attractive" only changed by a fraction, moving from 9.7% during the pandemic to 11.0% afterward. A notable finding is the high number of participants who were unsure or had not seen such deals, particularly among the Azerbaijani group at 40%. Because no statistically significant difference was observed, Hypothesis H1b was rejected.

Table 23 depicts the attractiveness ratings for "Buy one, get one free" deals regarding during and post-pandemic periods with the values of Wilcoxon test. For the Total Sample, the results show a highly significant difference between the two periods, with a p-value of .001 and a strong Z-score of -5.26. This indicates that the perceived attractiveness of BOGO deals changed substantially once the pandemic ended. Specifically, those who rated these deals as "very attractive" dropped from 27.0% during the pandemic to 16.0% in the post-pandemic period.

Table 23: Attractiveness ratings for "Buy one, get one free" deals regarding during and post-pandemic periods

		Pandemic period							
		during			after				
Group	Attractiveness	<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>Z</i>	<i>p</i>
Total Sample	Very attractive	49.92	81	27.0	45.79	48	16.0	-5.26	.001
	Attractive		119	39.7		123	41.0		
	Neutral		40	13.3		69	23.0		
	Unattractive		9	3.0		8	2.7		
	Very unattractive		2	.7		3	1.0		
	have not seen/not sure		49	16.3		49	16.3		
	Total		300	100		300	100		
Azerbaijani	Very attractive	13.25	25	16.7	16.63	28	18.7	-.72	.473
	Attractive		55	36.7		48	32.0		
	Neutral		32	21.3		33	22.0		
	Unattractive		6	4.0		8	5.3		

	Very unattractive		2	1.3		3	2.0		
	have not seen/not sure		30	20		30	20		
	Total		150	100		150	100		
Polish	Very attractive	37.38	56	37.3	31.64	20	13.3	-6.53	.001
	Attractive		64	42.7		75	50.0		
	Neutral		8	5.3		36	24.0		
	Unattractive		3	2.0		0	0		
	Very unattractive		0	0		0	0		
	have not seen/not sure		19	12.7		19	12.7		
	Total		150	100		150	100		

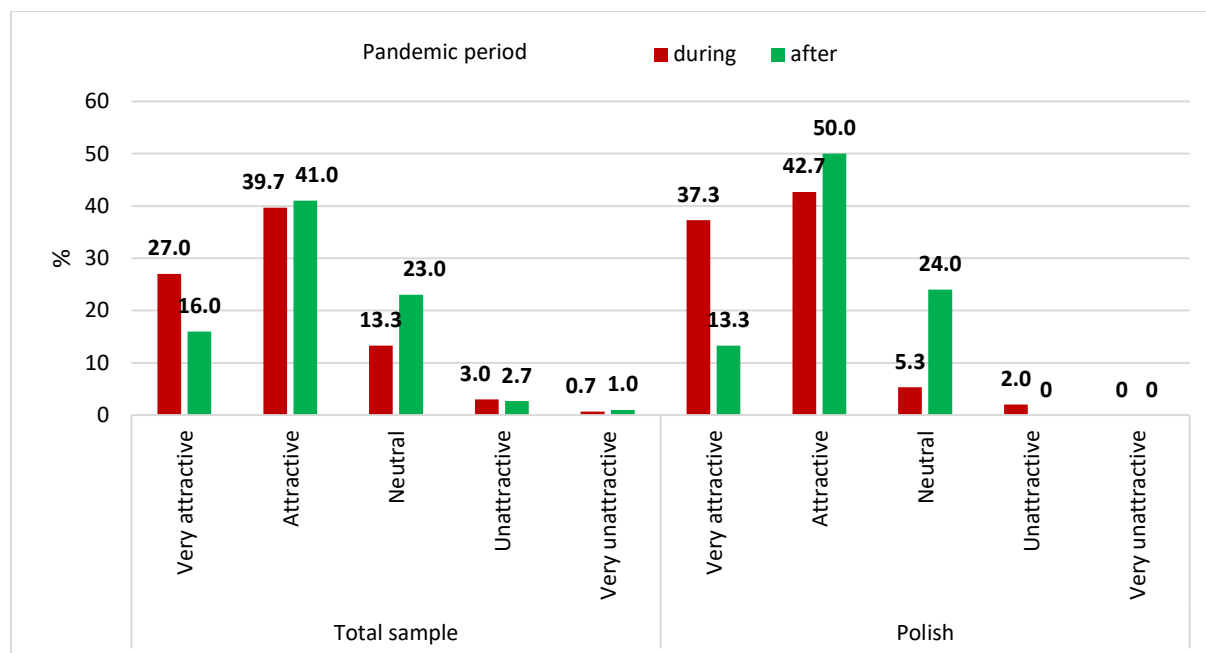
n – number of participants; % - group percentage; MR – mean rank; *Z* – Wilcoxon test; *p* – statistical

Note. Wilcoxon test is not based on frequency distributions. They are depicted for illustrative purposes only.

Source: Author's elaboration

Figure 11 illustrates a significant shift in consumer sentiment regarding BOGO deals as the pandemic period concluded. In the Total Sample, the "Very Attractive" rating dropped sharply from 27.0% to 16.0%. This visual trend is even more pronounced in the Polish group, where the "Very Attractive" responses plummeted from 37.3% during the pandemic to just 13.3% afterward. These drops in high-level interest support the conclusion that BOGO deals had a significantly greater influence during the pandemic period than in the post-pandemic period, confirming Hypothesis H1c. The figure focuses exclusively on the Polish group and the Total Sample because these were the only segments that produced statistically significant results.

Figure 11: Differences regarding attractiveness of “Buy one, get one free” deals between the pandemic period and the post-pandemic period ratings.



Source: Author’s elaboration

Table 24 depicts the attractiveness ratings for coupon or voucher deals regarding during and post-pandemic periods with the values of Wilcoxon test. The data provides strong evidence of a shift in consumer behaviour. For the Total Sample, the results are highly significant with a p-value of .001 and a Z-score of -4.25. This indicates a clear decrease in the attractiveness of coupons and vouchers since the pandemic ended. The percentage of respondents who found these deals either "Very Attractive" or "Attractive" dropped from 43.0% during the pandemic to 34.0% in the post-pandemic period.

Table 24: Attractiveness ratings for coupon or voucher deals regarding during and post-pandemic periods

		Pandemic period							
		during			after				
Group	Attractiveness	<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>Z</i>	<i>p</i>
Total Sample	Very attractive	25.81	48	16.0	34.11	39	13.0	-4.25	.001
	Attractive		81	27.0		63	21.0		
	Neutral		55	18.3		68	22.7		
	Unattractive		23	7.7		38	12.7		

	Very unattractive		6	2.0		5	1.7		
	have not seen/not sure		87	29.0		87	29.0		
	Total		300	100		300	100		
Azerbaijani	Very attractive	7.0	25	16.7	11.38	21	14.0	-2.23	.026
	Attractive		24	16.0		21	14.0		
	Neutral		23	15.3		27	18.0		
	Unattractive		7	4.7		11	7.3		
	Very unattractive		6	4.0		5	3.3		
	have not seen/not sure		65	43.3		65	43.3		
	Total		150	100		150	100		
Polish	Very attractive	19.70	23	15.3	23.32	18	12.0	-3.63	.001
	Attractive		57	38.0		42	28.0		
	Neutral		32	21.3		41	27.3		
	Unattractive		16	10.7		27	18.0		
	Very unattractive		0	0		0	0		
	have not seen/not sure		22	14.7		22	14.7		
	Total		150	100		150	100		

n – number of participants; % - group percentage; MR – mean rank; *Z* – Wilcoxon test; *p* – statistical

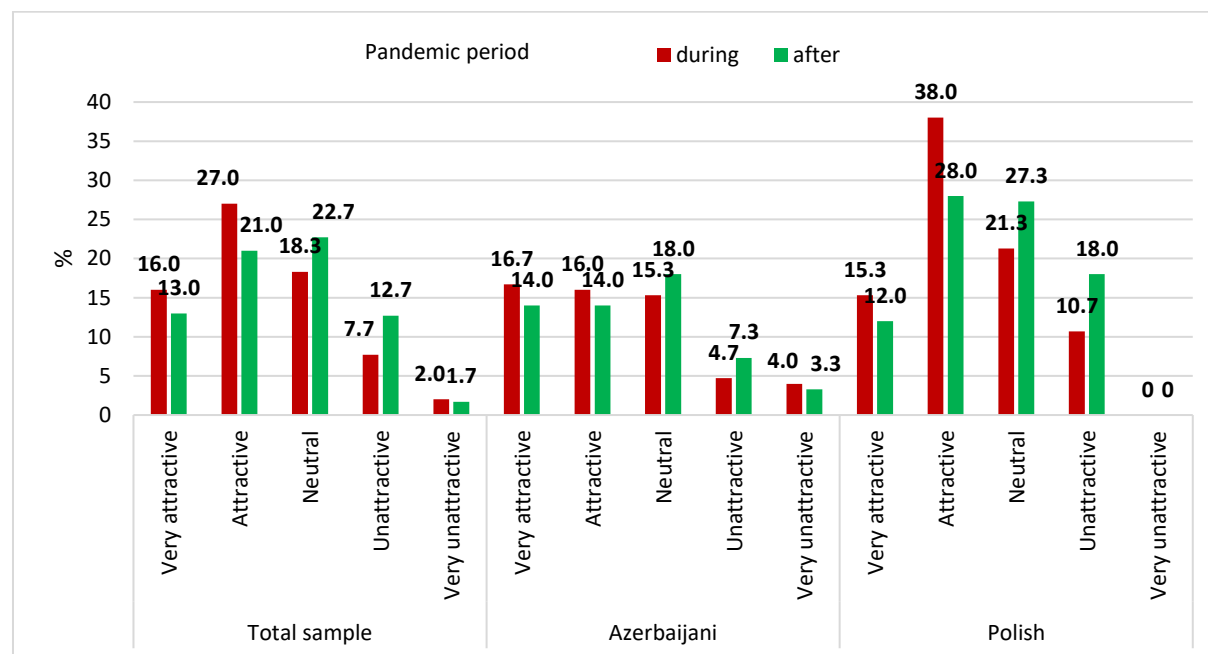
Note. Wilcoxon test is not based on frequency distributions. They are depicted for illustrative purposes only.

Source: Author's elaboration

The ratings for coupon or voucher deals were higher for the pandemic periods than for the post-pandemic period (see Figure 12), which confirms hypothesis H1d. Figure 12 visually demonstrates this decline by showing a downward trend in the "Very Attractive" and "Attractive" categories. While these positive ratings totaled 43% during the pandemic period,

they dropped to 34% in the post-pandemic period. The figure also highlights an increase in negative sentiment; for example, those who found these deals "Unattractive" rose from 7.7% to 12.7% in the total sample.

Figure 12: Differences regarding coupon or voucher deals between the pandemic period and the post-pandemic period ratings.



Source: Author's elaboration

To assess the impact of loyalty deals on consumer behaviour, the research tested Hypothesis H1e, which proposed that loyalty programs would have a more pronounced influence during the pandemic period than during the post-pandemic period. Table 25 depicts the attractiveness ratings for loyalty cards regarding during and post-pandemic periods with the values of Wilcoxon test.

The statistical analysis from Table 25, supported by the visual evidence in Figure 13, indicates a significant shift in consumer perception. For the Total Sample, the results of the Wilcoxon test are statistically significant with a p-value of .024 and a Z-score of -2.26.

Table 25: Attractiveness ratings for loyalty cards deals regarding during and post-pandemic periods

	Pandemic period		
	during	after	

Group	Attractiveness	<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>Z</i>	<i>p</i>
Total Sample	Very attractive	33.77	42	14.0	36.52	28	9.3	-2.26	.024
	Attractive		85	28.3		94	31.3		
	Neutral		87	29.0		87	29.0		
	Unattractive		15	5.0		18	6.0		
	Very unattractive		3	1.0		5	1.7		
	have not seen/not sure		68	22.7		68	22.7		
	Total		300	100		300	100		
Azerbaijani	Very attractive	14.12	14	9.3	16.56	14	9.3	-1.05	.295
	Attractive		40	26.7		39	26.0		
	Neutral		39	26.0		34	22.7		
	Unattractive		9	6.0		14	9.3		
	Very unattractive		3	2.0		4	2.7		
	have not seen/not sure		45	30.0		45	30.0		
	Total		150	100		150	100		
Polish	Very attractive	20.0	28	18.7	20.74	14	9.3	-2.17	.030
	Attractive		45	3.0		55	36.7		
	Neutral		48	32.0		53	35.3		
	Unattractive		6	4.0		4	2.7		
	Very unattractive		0	0		1	.7		
	have not seen/not sure		23	15.3		23	15.3		
	Total		150	100		150	100		

n – number of participants; % - group percentage; *MR* – mean rank; *Z* – Wilcoxon test; *p* – statistical

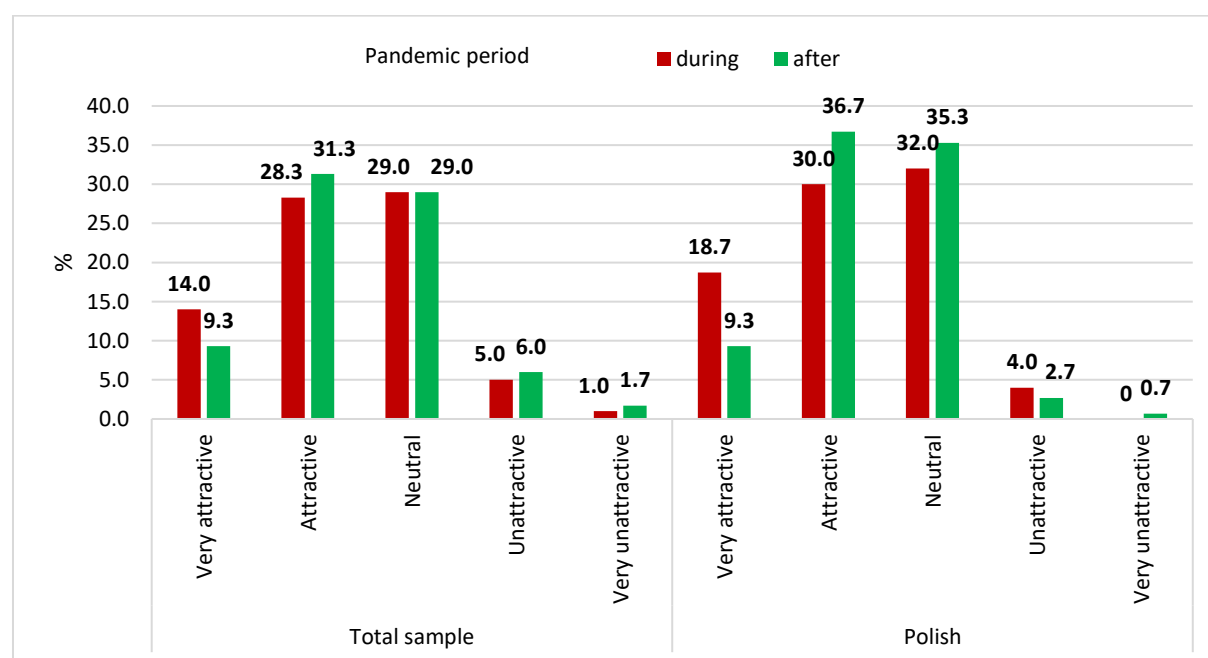
Note. Wilcoxon test is not based on frequency distributions. They are depicted for illustrative purposes only.

Source: Author's elaboration

The ratings for loyalty cards were higher for the pandemic periods than for the post-pandemic period in the total sample and in the Polish group (see Figure 13), which confirms hypothesis H1e.

Figure 13 visually demonstrates that the attractiveness of loyalty deals declined following the pandemic period, particularly in the "Very Attractive" category, which fell from 14.0% to 9.3% in the total sample. This downward trend is most visible in the Polish subgroup, where extreme interest dropped from 18.7% to 9.3%. Although there was a minor increase in the "Attractive" category, the overall shift indicates that the peak influence of loyalty programs occurred during the pandemic rather than after it, thus confirming Hypothesis H1e.

Figure 13: Differences regarding attractiveness of loyalty cards between the pandemic period and the post-pandemic period ratings.



Source: Author's elaboration

The figure 13 focuses exclusively on the Polish group and the total sample because these were the only segments to yield statistically significant results. The Wilcoxon test for the Polish group ($p = .030$) and the Total Sample ($p = .024$) confirmed a genuine change in sentiment between the two periods. In contrast, the Azerbaijani group was excluded from the visual because their p -value ($p = .295$) indicated no significant shift in perception, making their data less relevant for illustrating a change in consumer habits.

To evaluate the impact of free trials or demos on consumer behaviour, the research examined Hypothesis H1f, which predicted these deals would exert a stronger influence during the pandemic period compared to the post-pandemic period. The statistical data from Table 26, supported by the visual trends in Figure 14, indicates a significant shift in consumer behaviour. For the Total Sample, the Wilcoxon test yielded a p-value of .001 with a Z-score of -3.20. This represents a statistically significant decline in the perceived attractiveness of free trials or demos since the pandemic period ended.

Table 26: Attractiveness ratings for free trial or demo deals regarding during and after pandemic periods

		Pandemic period							
		during			after				
Group	Attractiveness	<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>Z</i>	<i>p</i>
Total Sample	Very attractive	27.33	21	7.0	28.25	19	6.3	-3.20	.001
	Attractive		75	25.0		66	22.0		
	Neutral		73	24.3		68	22.7		
	Unattractive		19	6.3		33	11.0		
	Very unattractive		5	1.7		7	2.3		
	have not seen/not sure		107	35.7		107	35.7		
	Total		300	100		300	100		
Azerbaijani	Very attractive	14.19	11	7.3	13.92	7	4.7	-1.91	.056
	Attractive		34	22.7		36	24.0		
	Neutral		34	22.7		31	2.7		
	Unattractive		9	6.0		12	8.0		
	Very unattractive		4	2.7		6	4.0		
	have not seen/not sure		58	38.7		58	38.7		
	Total		150	100		150	100		

Polish	Very attractive	13.5	10	6.7	14.83	12	8.0	-2.63	.009
	Attractive		41	27.3		30	2.0		
	Neutral		39	26		37	24.7		
	Unattractive		10	6.7		21	14.0		
	Very unattractive		1	.7		1	.7		
	have not seen/not sure		49	32.7		49	32.7		
	Total		150	100		150	100		

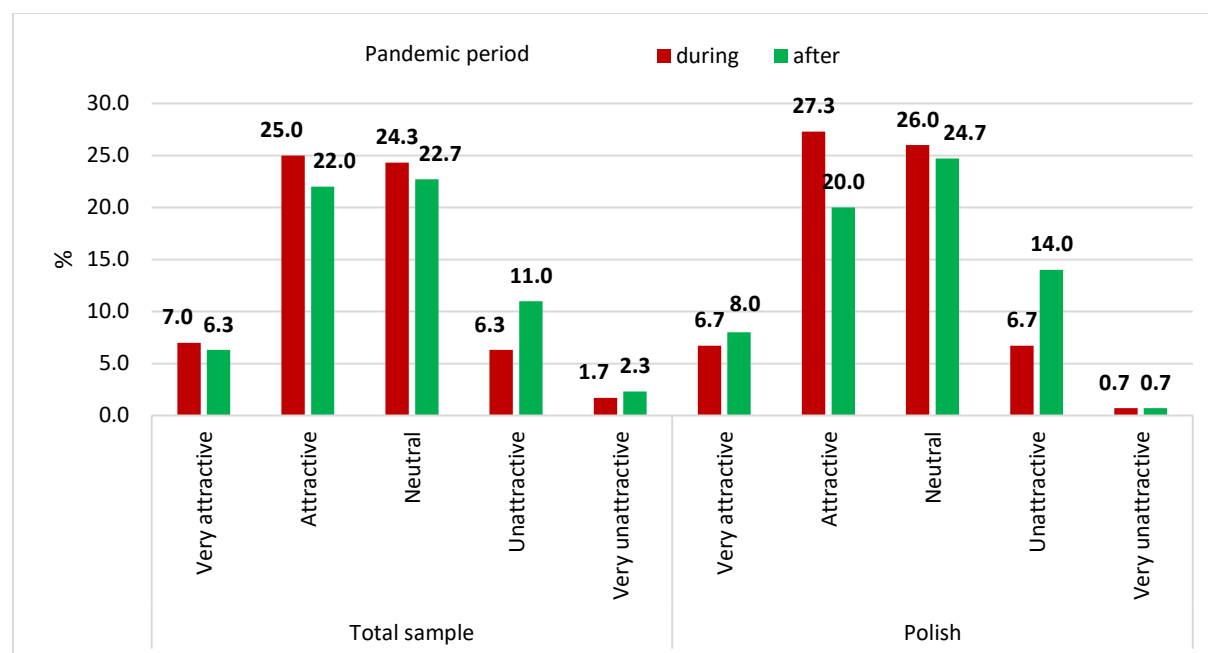
n – number of participants; % - group percentage; MR – mean rank; *Z* – Wilcoxon test; *p* – statistical

Note. Wilcoxon test is not based on frequency distributions. They are depicted for illustrative purposes only.

Source: Author's elaboration

The ratings for free trial or demo deals were higher for the pandemic periods than for the post-pandemic period in the total sample and in the Polish group (see Figure 14), which confirms hypothesis H1f. Figure 14 demonstrates the measurable decline in the appeal of free trial or demo deals as consumers transitioned into the post-pandemic period. For the total sample, the visual data shows a clear shift away from positive ratings toward the "Unattractive" category, which rose from 6.3% during the pandemic to 11.0% afterward.

Figure 14: Differences regarding attractiveness of free trial or demo deals between the pandemic period and the post-pandemic period ratings.



Source: Author's elaboration

This trend is most significant within the Polish subgroup, where the "Unattractive" sentiment more than doubled, increasing from 6.7% to 14.0%. The figure specifically highlights the total sample and the Polish group because their shifts were statistically significant ($p = .001$ and $p = .009$ respectively), while the Azerbaijani group was omitted due to a lack of significant movement ($p = .056$).

6.2.2.2 Changes in perceived attractiveness of promotional deals from the pandemic to the post-pandemic and promotional buying behaviours

Spearman's rho correlation (Spearman, 1904) coefficient was used to test H2 because the hypothesis examines the association between changes in respondents' perceived attractiveness of promotional deals and changes in their self-reported promotional buying behaviours. The purpose was to assess whether respondents' subjective evaluations of promotional attractiveness were associated with their declared behavioural tendencies. Perceived attractiveness was measured using the scale "Very attractive," "Attractive," "Neutral," "Unattractive," and "Very unattractive," while promotional buying behaviours were measured using the scale "Strongly Agree," "Agree," "Neither agree nor disagree," "Disagree," and "Strongly disagree." Since both measures were ordinal, Spearman's rho was appropriate as a

non-parametric correlation measure. Table 27 depicts Spearman's rho correlation coefficients between change scores for perceived attractiveness and change scores for promotional buying behaviours. The change scores were calculated by subtracting the values acquired for the pandemic period from the values acquired for the post-pandemic period. Therefore, higher change scores indicate an increase in perceived attractiveness in the post-pandemic period relative to the pandemic period, while lower change scores indicate a decrease.

Table 27: Correlation coefficients between change scores for perceived attractiveness of promotional deals and change scores for promotional buying behaviours

Change scores	Promotional deals											
	Price discounts		Loyalty cards		Free trial or demo		Bundling products		Coupons or vouchers		Buy one, get one free	
Buying behaviours	ρ	p	ρ	p	ρ	p	ρ	p	ρ	p	ρ	p
Buying more products more than one needs	.093	.064	.091	.083	.149	.019	.175	.005	.167	.007	.124	.025
Tendency to buy products that come with promotional deals	.206	.001	.310	.001	.235	.001	.239	.001	.228	.001	.214	.001
Trying a new product because of sales promotions	.102	.047	.220	.001	.071	.162	.083	.112	.028	.341	.173	.003
Stocking up on products in order to save money	-.024	.346	.048	.235	.077	.144	.014	.417	.155	.012	.074	.121

ρ - Spearman's rho correlation coefficient; p – one-tailed statistical significance

Source: Author's elaboration

The increase in perceived attractiveness of price discounts and loyalty cards deals in the post-pandemic period relative to the pandemic period correlated positively with the increase in tendency to buy products that come with promotional deals and with trying a new product because of sales promotions. The increase in perceived attractiveness of free trial or demo and bundling deals in the post-pandemic period relative to the pandemic period correlated positively with the increase in buying more products more than one needs and tendency to buy products that come with promotional deals. The increase in perceived attractiveness of coupons or vouchers and bundling products in the post-pandemic period relative to the pandemic period correlated positively with the increase in buying more products more than one needs, tendency to buy products that come with promotional deals and stocking up on products in order to save money. The increase in perceived attractiveness of buy one, get one free deals in the post-pandemic period relative to the pandemic period correlated positively with the increase in buying more products more than one needs, tendency to buy products that come with promotional deals and trying a new product because of sales promotions.

Overall, several statistically significant positive correlations were observed between changes in perceived promotional attractiveness and changes in promotional buying behaviours. However, most relationships were weak in magnitude, suggesting that although the associations exist, their practical strength is limited. Therefore, Hypothesis H2 was supported at the statistical level. At the same time, the results indicate that consumer behaviour during the pandemic is the strongest predictor of behaviour in the post-pandemic period. This suggests that behavioural continuity plays a dominant role, while changes in perceived promotional attractiveness are associated with behavioural change but do not independently determine consumer behaviour.

6.2.2.3 Consumers' sensitivity to promotional frequency

To evaluate the consumers' sensitivity to the frequency of promotions, the research examined Hypothesis H3, which predicted that consumers' sensitivity to the frequency of promotions would decrease in the post-pandemic period compared to the pandemic period.

Table 28 depicts the ratings for being influenced by the frequency of sales promotions during and post-pandemic periods with the values of Wilcoxon test (Wilcoxon, 1945). The statistical analysis of the data indicates that there is no measurable shift in how consumers are influenced by the frequency of sales promotions across the two periods. According to the Wilcoxon signed-rank test, the p-value for the Total Sample was 0.323, which is well above the required 0.05

threshold for statistical significance. This result demonstrates that consumer sensitivity to how often promotions occur remained remarkably consistent regardless of the transition out of the pandemic.

Table 28: Ratings for being influenced by the frequency of sales promotions during and post-pandemic periods

Group	Being influenced by the frequency of sales promotions	Pandemic period							
		during			after				
		<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>Z</i>	<i>p</i>
Total Sample	Strongly Agree	62.22	25	8.3	57.50	26	8.7	-.99	.323
	Agree		111	37.0		117	39.0		
	Neither agree nor disagree		94	31.3		90	30.0		
	Disagree		53	17.7		54	18.0		
	Strongly disagree		17	5.7		13	4.3		
	Total		300	100		300	100		
Azerbaijani	Strongly Agree	32.84	14	9.3	13.12	15	10.0	-.54	.588
	Agree		48	32.0		50	33.3		
	Neither agree nor disagree		55	36.7		52	34.7		
	Disagree		26	17.3		27	18.0		
	Strongly disagree		7	4.7		6	4.0		
	Total		150	100		150	100		
Polish	Strongly Agree	29.79	11	7.3	26.0	11	7.3	-.85	.397
	Agree		63	42.0		67	44.7		
	Neither agree nor disagree		39	26.0		38	25.3		
	Disagree		27	18.0		27	18.0		
	Strongly disagree		10	6.7		7	4.7		
	Total		150	100		150	100		

n – number of participants; % - group percentage; *MR* – mean rank; *Z* – Wilcoxon test; *p* – statistical significance

Note. Wilcoxon test is not based on frequency distributions. They are depicted for illustrative purposes only.

Source: Author's elaboration

Based on the high p-values and the lack of significant movement in the Z-scores, hypothesis H3 is rejected. The data does not support the claim that consumers became less sensitive to the frequency of promotions in the post-pandemic period. Instead, the findings suggest that the frequency of sales promotion deals continues to influence buying habits at a constant level.

6.2.2.4 The relationship between promotional exposure and impulse purchasing

To evaluate the connection between promotional exposure and impulse purchasing, the research examined Hypothesis H4, which proposed that the positive relationship between promotional exposure and impulse purchasing was stronger during the pandemic than in the post-pandemic period. Table 29 depicts Spearman's rho correlation coefficients (Spearman, 1904) between promotional exposure and impulse purchasing in the pandemic period and in the post-pandemic period.

Table 29: Correlation coefficients between promotional exposure and impulse purchasing in the pandemic period and in the post-pandemic period

	Period			
	Pandemic		Post-pandemic	
Changes Score	ρ	p	ρ	p
Promotional exposure - Impulse purchasing	.574	.001	.619	.001

ρ - Spearman's rho correlation coefficient; p – one-tailed statistical significance

Source: Author's elaboration

The statistical analysis using Spearman's rho correlation coefficients reveals that a significant positive relationship exists between these two variables across both timeframes. During the pandemic period, the correlation coefficient was .574 with a p-value of .001, indicating a moderate and statistically significant positive relationship between promotional exposure and impulse purchasing. In the post-pandemic period, the coefficient increased to .619, also with a p-value of .001.

While both periods show a significant link, the data indicates that the relationship actually became numerically stronger in the post-pandemic period rather than weaker. In statistical

terms, to claim a "significant difference" between two correlation coefficients, researchers often look for a larger gap or perform a specific comparison test; however, since the values are relatively close (.574 versus .619), it suggests that the positive relationship between promotional exposure and impulse purchasing has remained remarkably stable and consistent across both periods.

Based on these findings, hypothesis H4 is rejected. The results do not support the proposal that the positive relationship between promotional exposure and impulse purchasing was stronger during the pandemic than in the post-pandemic period.

6.2.2.5 The differences between Azerbaijani and Polish consumers in behavioural responses to promotions from the pandemic to the post-pandemic period

This section evaluates Hypothesis H5, which posits that significant cross-cultural differences exist between Azerbaijani and Polish consumers in their behavioural responses to promotional offers.

The Mann–Whitney U test (Mann & Whitney, 1947) was selected to test hypotheses because the analysis concerns differences between two independent national groups and the behavioural response variables were obtained from Likert-type agree–disagree items, which are ordinal in nature (Chicco et al., 2025; Koo & Yang, 2025). In this context, a non-parametric test is methodologically more appropriate than a parametric mean-comparison test, as it does not require the assumption of normally distributed interval-level data. The test therefore allows the study to assess whether the response distributions of Azerbaijani and Polish respondents differ significantly, while the percentage distributions are used to interpret the substantive direction of these differences.

To test this overarching hypothesis, two sub-hypotheses were examined: H5a, focusing on general behavioural differences between Azerbaijani and Polish consumers, and H5b, predicting stronger responsiveness among Azerbaijani consumers. Four consecutive tables (Tables 30–33) present the distributions of behavioural responses to promotions across the two periods. Tables 30 and 31 report responses during the pandemic period, whereas Tables 32 and 33 report responses in the post-pandemic period. The division into two tables for each period was made for presentation purposes due to the large number of behavioural response items.

Because the behavioural variables were measured using ordinal Likert-type scales and the comparison involved two independent national groups, differences between Azerbaijani and Polish respondents were assessed using the Mann–Whitney U test. The tables report the mean ranks (MR) for each group, together with the standardized Z statistic derived from the Mann–Whitney U test and the corresponding significance level (p). Mean ranks indicate the relative tendency of one group to provide higher or lower ratings than the other, while the frequency distributions and percentages are presented solely to facilitate interpretation of the direction and substantive nature of the observed differences.

Table 30: Distributions of behavioural responses to promotions in the pandemic period in the groups of Azerbaijani and Polish consumers

		Group									
		Azerbaijani			Polish			Total			
Buying behaviours		<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>n</i>	%	<i>Z</i>	<i>p</i>
Visiting stores (e-stores) that have various sales promotions offers	Strongly Agree	162.51	20	13.3	138.49	40	26.7	60	20.0	-2.49	.013
	Agree		52	34.7		53	35.3	105	35.0		
	Neither agree nor disagree		52	34.7		30	20.0	82	27.3		
	Disagree		22	14.7		25	16.7	47	15.7		
	Strongly disagree		4	2.7		2	1.3	6	2.0		
Buying more products than one needs	Strongly Agree	157.97	17	11.3		29	19.3	46	15.3	-1.56	.120
	Agree		56	37.3		60	40.0	116	38.7		
	Neither agree nor disagree		47	31.3		24	16.0	71	23.7		
	Disagree		19	12.7		32	21.3	51	17.0		
	Strongly disagree		11	7.3		5	3.3	16	5.3		
Tendency to buy products	Strongly Agree	160.14	18	12.0	143.03	29	19.3	47	15.7	-2.05	.041
	Agree		65	43.3		73	48.7	138	46.0		
	Neither agree nor disagree		47	31.3		26	17.3	73	24.3		

that come with promotional deals	Disagree		18	12.0		19	12.7	37	12.3		
	Strongly disagree		2	1.3		3	2.0	5	1.7		
Trying a new product	Strongly Agree	161.6	18	12.0	140.86	27	18.0	45	15.0	-2.32	.020
	Agree		52	34.7		69	46.0	121	40.3		
	Neither agree nor disagree		54	36.0		25	16.7	79	26.3		
	Disagree		17	11.3		26	17.3	43	14.3		
	Strongly disagree		9	6.0		3	2.0	12	4.0		
Signing up for email or text notifications	Strongly Agree	151.12	10	6.7	149.88	15	10.0	25	8.3	-0.13	.899
	Agree		24	16.0		30	20.0	54	18.0		
	Neither agree nor disagree		43	28.7		27	18.0	70	23.3		
	Disagree		43	28.7		44	29.3	87	29.0		
	Strongly disagree		30	20.0		34	22.7	64	21.3		
Being influenced by the frequency of sales promotions	Strongly Agree	152.59	14	9.3	148.1	11	7.3	25	8.3	-0.44	.662
	Agree		48	32.0		63	42.0	111	37.0		
	Neither agree nor disagree		55	36.7		39	26.0	94	31.3		
	Disagree		26	17.3		27	18.0	53	17.7		
	Strongly disagree		7	4.7		10	6.7	17	5.7		
Stocking up on products during sales promotions	Strongly Agree	149.38	18	12.0	151.62	21	14.0	39	13.0	-0.23	.816
	Agree		58	38.7		53	35.3	111	37.0		
	Neither agree nor disagree		48	32.0		43	28.7	91	30.3		
	Disagree		17	11.3		28	18.7	45	15.0		
	Strongly disagree		9	6.0		5	3.3	14	4.7		

n – number of participants; % - group percentage; MR = Mean Rank; Z = standardized Mann–Whitney U statistic; *p* – statistical significance

Mann–Whitney U test is based on ranked individual responses rather than the frequency distributions presented in the table. Frequencies and percentages are reported for descriptive and interpretative purposes only.

Source: Author's elaboration

Table 31: Distributions of behavioural responses to promotions in the pandemic period in the groups of Azerbaijani and Polish consumers

		Group									
		Azerbaijani			Polish			Total			
Buying behaviours		<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>n</i>	%	<i>Z</i>	<i>p</i>
Avoiding buying discounted or promotional products	Strongly Agree	127.72	12	8.0	173.28	9	6.0	21	7.0	-4.71	.001
	Agree		37	24.7		17	11.3	54	18.0		
	Neither agree nor disagree		57	38.0		39	26.0	96	32.0		
	Disagree		33	22.0		55	36.7	88	29.3		
	Strongly disagree		11	7.3		30	20.0	41	13.7		
Being disappointed when a sales promotion did not offer the advertised discount Preferences	Strongly Agree	148.52	20	13.3	152.48	15	10.0	35	11.7	-0.42	.677
	Agree		55	36.7		60	40.0	115	38.3		
	Neither agree nor disagree		49	32.7		47	31.3	96	32.0		
	Disagree		22	14.7		21	14.0	43	14.3		
	Strongly disagree		4	2.7		7	4.7	11	3.7		
Preferences towards	Strongly Agree	152.62	16	10.7	148.38	18	12.0	34	11.3	-0.46	.644
	Agree		79	52.7		77	51.3	156	52.0		

promotional deals varying depending on the type of product	Neither agree nor disagree		36	24.0		44	29.3	80	26.7		
	Disagree		15	10.0		9	6.0	24	8.0		
	Strongly disagree		4	2.7		2	1.3	6	2.0		
Not being affected by promotional deals	Strongly Agree	124.41	14	9.3	176.59	2	1.3	16	5.3	-5.39	.001
	Agree		27	18.0		18	12.0	45	15.0		
	Neither agree nor disagree		60	40.0		35	23.3	95	31.7		
	Disagree		31	20.7		50	33.3	81	27.0		
	Strongly disagree		18	12.0		45	30.0	63	21.0		

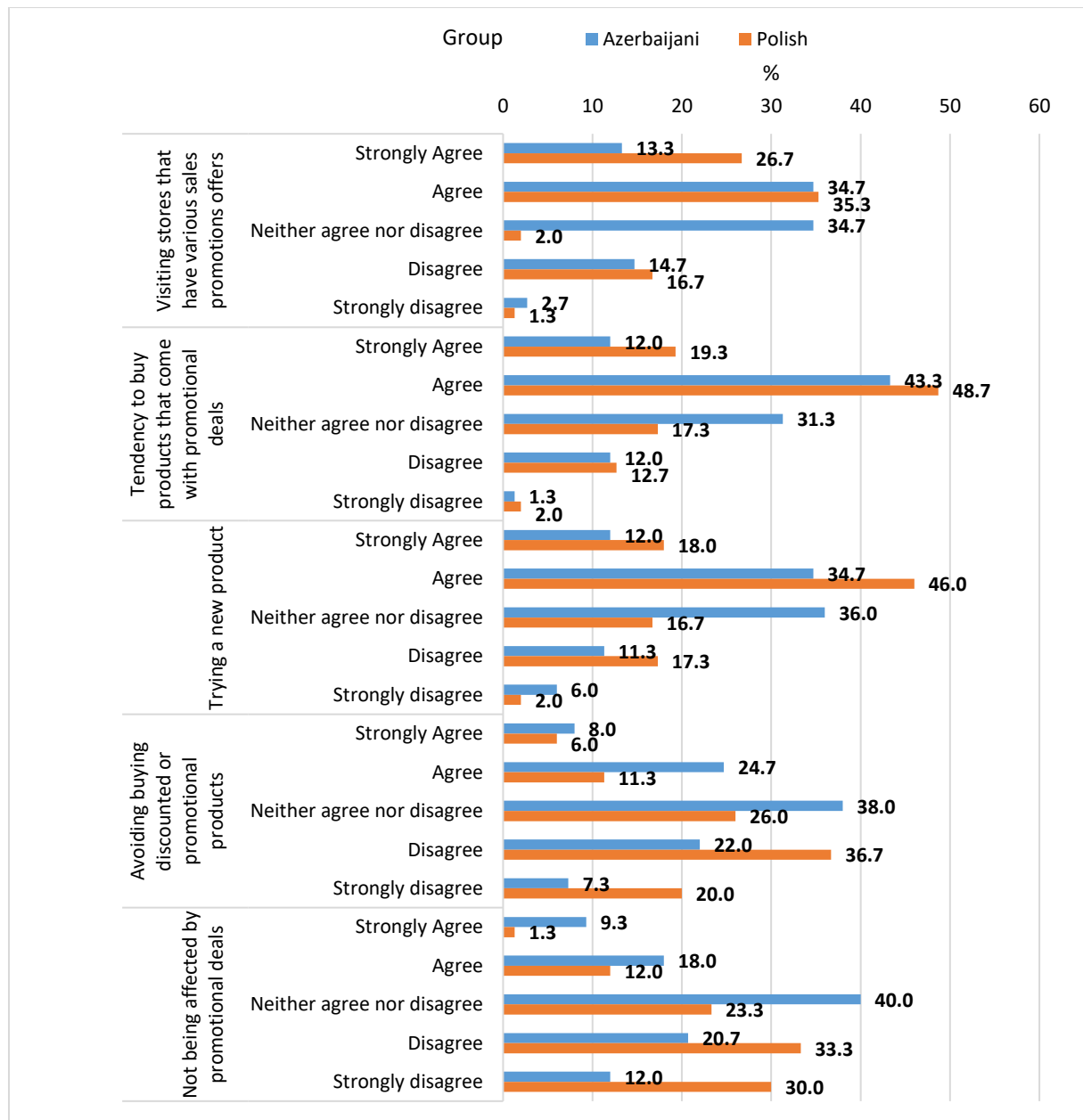
n – number of participants; % - group percentage; MR = Mean Rank; Z = standardized Mann–Whitney U statistic; *p* – statistical significance

Mann–Whitney U test is based on ranked individual responses rather than the frequency distributions presented in the table. Frequencies and percentages are reported for descriptive and interpretative purposes only.

Source: Author’s elaboration

The Mann–Whitney U test results indicate whether the differences between Azerbaijani and Polish respondents are statistically significant. In this analysis, a p-value below .05 shows that the response distribution differs significantly between the two groups. Based on the significant results reported in Tables 30 and 31, “Visiting stores that have various sales promotions offers,” “Tendency to buy products that come with promotional deals,” and “Trying a new product” were more characteristic for the Polish group. In contrast, “Avoiding buying discounted or promotional products” and “Not being affected by promotional deals” were more characteristic for the Azerbaijani group. These significant results were selected for Figure 15 because the percentage distributions across the agree–disagree scale indicate the direction of the group differences.

Figure 15: Differences regarding behavioural responses to promotions in the pandemic period between the groups of Azerbaijani and Polish consumers.



Source: Author's elaboration

Figure 15 shows that, during the pandemic period, Polish respondents reported stronger active engagement with sales promotions. They more often selected “Strongly Agree” and “Agree” for “Visiting stores that have various sales promotions offers,” “Tendency to buy products that come with promotional deals,” and “Trying a new product.” In contrast, Azerbaijani respondents showed higher agreement with more resistant or less responsive behaviours,

especially “Avoiding buying discounted or promotional products” and “Not being affected by promotional deals.” These significant results were included in Figure 15 because they visually show the main direction of the statistically significant differences identified in Tables 30 and 31.

Table 32: Distributions of behavioural responses to promotions in the post-pandemic period in the groups of Azerbaijani and Polish consumers

		Group									
		Azerbaijani			Polish			Total			
Buying behaviours		<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>n</i>	%	<i>Z</i>	<i>p</i>
Visiting stores (e-stores) that have various sales promotions offers	Strongly Agree	164.02	20	13.3	136.98	32	21.3	52	17.3	-2.85	.004
	Agree		56	37.3		73	48.7	129	43.0		
	Neither agree nor disagree		50	33.3		22	14.7	72	24.0		
	Disagree		21	14.0		20	13.3	41	13.7		
	Strongly disagree		3	2.0		3	2.0	6	2.0		
Buying more products than one needs	Strongly Agree	158.85	13	8.7	142.15	17	11.3	30	10.0	-1.76	.079
	Agree		56	37.3		72	48.0	128	42.7		
	Neither agree nor disagree		49	32.7		29	19.3	78	26.0		
	Disagree		22	14.7		26	17.3	48	16.0		
	Strongly disagree		10	6.7		6	4.0	16	5.3		
Tendency to buy products that come with promotional deals	Strongly Agree	157.21	14	9.3	143.79	24	16.0	38	12.7	-1.44	.149
	Agree		73	48.7		74	49.3	147	49.0		
	Neither agree nor disagree		47	31.3		33	22.0	80	26.7		
	Disagree		12	8.0		15	10.0	27	9.0		

	Strongly disagree		4	2.7		4	2.7	8	2.7		
Trying a new product	Strongly Agree	156.91	14	9.3	144.09	23	15.3	37	12.3	-1.34	.180
	Agree		57	38.0		58	38.7	115	38.3		
	Neither agree nor disagree		47	31.3		40	26.7	87	29.0		
	Disagree		24	16.0		22	14.7	46	15.3		
	Strongly disagree		8	5.3		7	4.7	15	5.0		
Signing up for email or text notifications	Strongly Agree	146.41	10	6.7	154.49	7	4.7	17	5.7	-0.84	.401
	Agree		34	22.7		38	25.3	72	24.0		
	Neither agree nor disagree		37	24.7		29	19.3	66	22.0		
	Disagree		41	27.3		39	26.0	80	26.7		
	Strongly disagree		28	18.7		37	24.7	65	21.7		
Being influenced by the frequency of sales promotions	Strongly Agree	153.68	15	10.0	147.32	11	7.3	26	8.7	-0.67	.505
	Agree		50	33.3		67	44.7	117	39.0		
	Neither agree nor disagree		52	34.7		38	25.3	90	30.0		
	Disagree		27	18.0		27	18.0	54	18.0		
	Strongly disagree		6	4.0		7	4.7	13	4.3		
Stocking up on products during sales promotions	Strongly Agree	152.13	17	11.3	148.87	19	12.7	36	12.0	-0.34	.734
	Agree		51	34.0		56	37.3	107	35.7		
	Neither agree nor disagree		54	36.0		41	27.3	95	31.7		
	Disagree		19	12.7		27	18.0	46	15.3		

	Strongly disagree		9	6.0		7	4.7	16	5.3		
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n – number of participants; % - group percentage; MR = Mean Rank; Z = standardized Mann–Whitney U statistic; p – statistical significance

Note. Mann–Whitney U test is based on ranked individual responses rather than the frequency distributions presented in the table. Frequencies and percentages are reported for descriptive and interpretative purposes only.

Source: Author's elaboration

Table 33: Distributions of behavioural responses to promotions in the post-pandemic period in the groups of Azerbaijani and Polish consumers

		Group									
		Azerbaijani			Polish			Total			
Buying behaviours		<i>MR</i>	<i>n</i>	%	<i>MR</i>	<i>n</i>	%	<i>n</i>	%	<i>Z</i>	<i>p</i>
Avoiding buying discounted or promotional products	Strongly Agree	125.68	11	7.3	175.32	9	6.0	20	6.7	-5.12	.001
	Agree		50	33.3		19	12.7	69	23.0		
	Neither agree nor disagree		47	31.3		40	26.7	87	29.0		
	Disagree		34	22.7		53	35.3	87	29.0		
	Strongly disagree		8	5.3		29	19.3	37	12.3		
Being disappointed when a sales promotion did not offer the advertised discount	Strongly Agree	144.28	17	11.3	156.72	17	11.3	34	11.3	-1.30	.194
	Agree		56	37.3		48	32.0	104	34.7		
	Neither agree nor disagree		52	34.7		49	32.7	101	33.7		
	Disagree		21	14.0		24	16.0	45	15.0		

	Strongly disagree		4	2.7		12	8.0	16	5.3		
Preferences towards promotional deals varying depending on the type of product	Strongly Agree	155.76	13	8.7	145.24	20	13.3	33	11.0	-1.14	.253
	Agree		76	50.7		77	51.3	153	51.0		
	Neither agree nor disagree		47	31.3		38	25.3	85	28.3		
	Disagree		10	6.7		13	8.7	23	7.7		
	Strongly disagree		4	2.7		2	1.3	6	2.0		
Not being affected by promotional deals	Strongly Agree	130.66	10	6.7	170.34	5	3.3	15	5.0	-4.08	.001
	Agree		36	24.0		27	18.0	63	21.0		
	Neither agree nor disagree		53	35.3		32	21.3	85	28.3		
	Disagree		37	24.7		46	30.7	83	27.7		
	Strongly disagree		14	9.3		40	26.7	54	18.0		

n – number of participants; % - group percentage; *U* – Mann Whitney U test; *p* – statistical significance

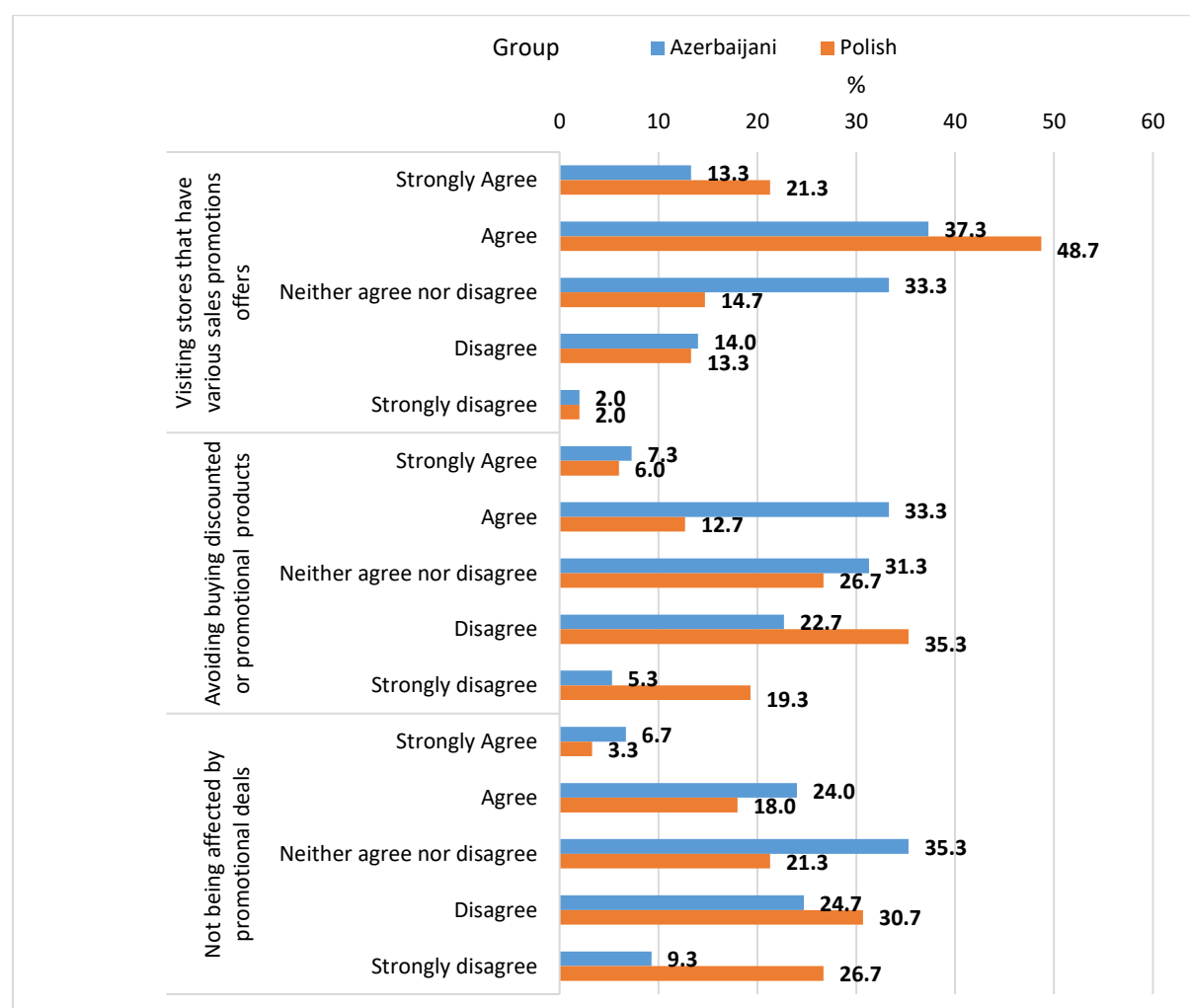
Note. Mann–Whitney U test is based on ranked individual responses rather than the frequency distributions presented in the table. Frequencies and percentages are reported for descriptive and interpretative purposes only.

Source: Author's elaboration

Figure 16 presents the statistically significant behavioural response differences between Azerbaijani and Polish respondents in the post-pandemic period, based on the Mann–Whitney U test results reported in Tables 32 and 33. In the post-pandemic period, visiting stores or e-stores with various sales promotion offers was more characteristic for the Polish group, whereas avoiding discounted or promotional products and reporting not being affected by promotional deals were more characteristic for the Azerbaijani group (see Figure 16).

In the post-pandemic period, the statistically significant differences were concentrated in fewer behavioural indicators than during the pandemic period. As shown in Figure 16, Polish respondents were more likely to agree with “Visiting stores that have various sales promotions offers,” indicating stronger continued engagement with promotional environments. By contrast, Azerbaijani respondents showed relatively higher agreement with “Avoiding buying discounted or promotional products” and “Not being affected by promotional deals,” suggesting a more cautious or less responsive post-pandemic orientation toward promotions. Figure 16 therefore includes these significant indicators from Tables 32 and 33 in order to summarize the main post-pandemic pattern of cross-cultural differences.

Figure 16: Differences regarding behavioural responses to promotions in the post-pandemic period between the groups of Azerbaijani and Polish consumers.



Source: Author's elaboration

The results confirm H5a, as statistically significant differences were found in several behaviours, such as store/e-store visiting and promotional avoidance. However, H5b is rejected because Polish consumers, rather than Azerbaijani consumers, demonstrated higher active promotional engagement. Consequently, the umbrella hypothesis H5 is partially supported, confirming the existence of cross-cultural differences, although not in the specific direction predicted for responsiveness.

6.2.2.6 The differences between Azerbaijani and Polish regarding preferred promotional deal types

Pearson's chi-squared test (Pearson, 1900) for independence was used to test H6 because the analysis examines whether two categorical variables are statistically associated: respondents' national group and their preferred promotional deal type within each product category. Since both variables are nominal categorical variables, the test was appropriate for identifying whether the distribution of preferred promotional deal types differs significantly between Azerbaijani and Polish respondents.

To address Hypothesis H6, this section analyzes whether Azerbaijani and Polish consumers differ in their preferences for specific promotional deal types across various product categories. This is operationalized through H6a, which examines general preference differences, and H6b, which examines whether Azerbaijani consumers demonstrate stronger preferences for volume and quantity maximization promotions (Buy One Get One Free and Product Bundling) than Polish consumers. Two consecutive tables, i.e., Tables 34 and 35, depict the distributions of preferred promotional deal types across product categories among Azerbaijani and Polish consumers, together with the results of Pearson's chi-squared test for independence.

Table 34: Distributions of preferred promotional deal types across product categories in the groups of Azerbaijani and Polish consumers

		Group							
		Azerbaijani		Polish					
Category	Promotional deal types	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	χ^2	<i>p</i>
Food, Household	Price Discount	87	58.0	72	48.0	159	53.0	13.51	.036
	Bundling products	20	13.3	20	13.3	40	13.3		

& Pets	Loyalty card	13	8.7	9	6.0	22	7.3		
	Coupon or voucher	2	1.3	8	5.3	10	3.3		
	Buy one, get one free	17	11.3	35	23.3	52	17.3		
	Others	3	2.0	2	1.3	5	1.7		
	None	8	5.3	4	2.7	12	4.0		
Electronics & Office	Price Discount	86	57.3	103	68.7	189	63.0	6.86	.334
	Bundling products	18	12.0	15	10.0	33	11.0		
	Loyalty card	12	8.0	9	6.0	21	7.0		
	Coupon or voucher	6	4.0	4	2.7	10	3.3		
	Buy one, get one free	15	10.0	9	6.0	24	8.0		
	Others	5	3.3	1	0.7	6	2.0		
	None	8	5.3	9	6.0	17	5.7		
Home, Furniture & Appliances	Price Discount	88	58.7	101	67.3	189	63.0	7.14	.308
	Bundling products	19	12.7	18	12.0	37	12.3		
	Loyalty card	14	9.3	7	4.7	21	7.0		
	Coupon or voucher	5	3.3	1	0.7	6	2.0		
	Buy one, get one free	10	6.7	10	6.7	20	6.7		
	Others	6	4.0	3	2.0	9	3.0		
	None	8	5.3	10	6.7	18	6.0		
Clothing, Shoes & Accessories	Price Discount	95	63.3	101	67.3	196	65.3	3.38	.760
	Bundling products	17	11.3	9	6.0	26	8.7		
	Loyalty card	13	8.7	16	10.7	29	9.7		
	Coupon or voucher	7	4.7	6	4.0	13	4.3		
	Buy one, get one free	12	8.0	12	8.0	24	8.0		
	Others	4	2.7	3	2.0	7	2.3		
	None	2	1.3	3	2.0	5	1.7		

n – number of participants; % - group percentage; χ^2 – Pearson test for independence; p – statistical significance

Source: Author's elaboration

Table 35: Distributions of preferred promotional deal types across product categories in the groups of Azerbaijani and Polish consumers

		Group							
		Azerbaijani		Polish					
Category	Promotional deal types	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	χ^2	<i>p</i>
Toys, Games, and Video Games	Price Discount	70	46.7	76	50.7	146	48.7	5.35	.500
	Bundling products	22	14.7	18	12.0	40	13.3		
	Loyalty card	13	8.7	9	6.0	22	7.3		
	Coupon or voucher	7	4.7	7	4.7	14	4.7		
	Buy one, get one free	13	8.7	17	11.3	30	10.0		
	Others	9	6.0	3	2.0	12	4.0		
	None	16	10.7	20	13.3	36	12.0		
Sporting Goods, Exercise & Fitness	Price Discount	80	53.3	74	49.3	154	51.3	10.28	.113
	Bundling products	18	12.0	13	8.7	31	10.3		
	Loyalty card	18	12.0	24	16.0	42	14.0		
	Coupon or voucher	8	5.3	3	2.0	11	3.7		
	Buy one, get one free	5	3.3	15	10.0	20	6.7		
	Others	7	4.7	4	2.7	11	3.7		
	None	14	9.3	17	11.3	31	10.3		
Books	Price Discount	58	38.7	60	40.0	118	39.3	2.92	.819
	Bundling products	27	18.0	25	16.7	52	17.3		
	Loyalty card	13	8.7	13	8.7	26	8.7		
	Coupon or voucher	2	1.3	4	2.7	6	2.0		
	Buy one, get one free	32	21.3	33	22.0	65	21.7		
	Others	9	6.0	4	2.7	13	4.3		
	None	9	6.0	11	7.3	20	6.7		
Photo	Price Discount	72	48.0	77	51.3	149	49.7	6.87	.333

& Personalize d Shop	Bundling products	24	16.0	13	8.7	37	12.3		
	Loyalty card	13	8.7	12	8.0	25	8.3		
	Coupon or voucher	7	4.7	7	4.7	14	4.7		
	Buy one, get one free	8	5.3	9	6.0	17	5.7		
	Others	4	2.7	1	0.7	5	1.7		
	None	22	14.7	31	20.7	53	17.7		
Pharmacy, Health & Wellness	Price Discount	73	48.7	62	41.3	135	45.0	20.35	.002
	Bundling products	22	14.7	7	4.7	29	9.7		
	Loyalty card	12	8.0	16	10.7	28	9.3		
	Coupon or voucher	5	3.3	2	1.3	7	2.3		
	Buy one, get one free	9	6.0	10	6.7	19	6.3		
	Others	6	4.0	4	2.7	10	3.3		
	None	23	15.3	49	32.7	72	24.0		

n – number of participants; % - group percentage; χ^2 – Pearson test for independence; p – statistical significance

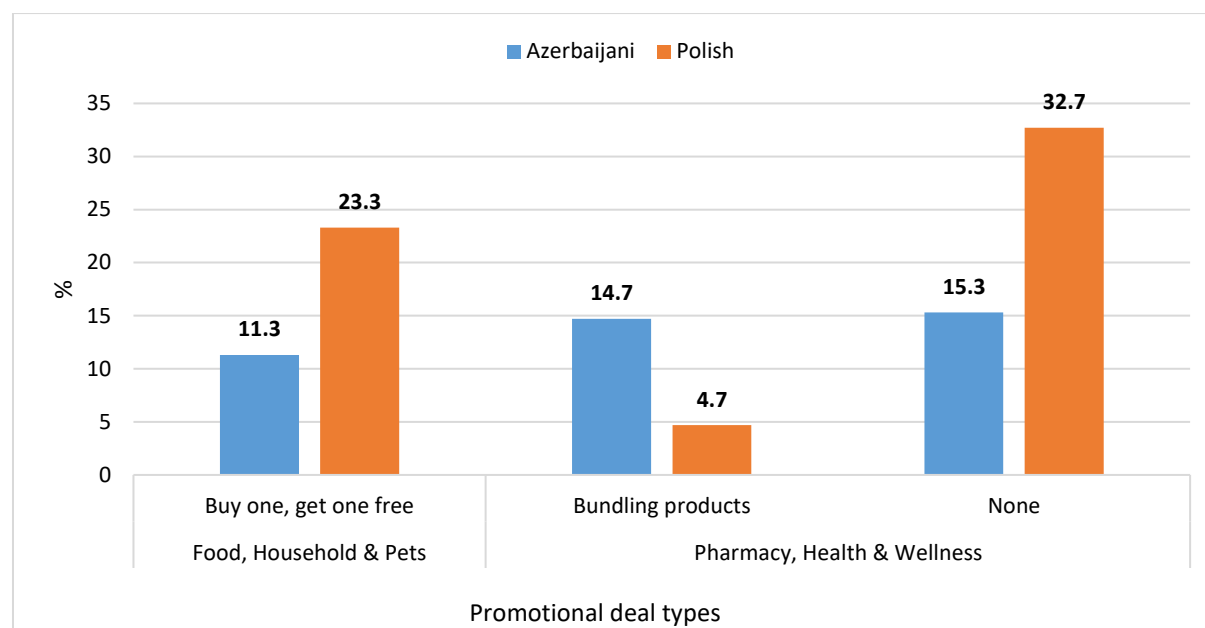
Source: Author's elaboration

Statistically significant relationships between being a member of Azerbaijani or Polish group and preferred promotion types in the categories of food, household and pets and pharmacy, health and wellness were found. Therefore acquired results support hypothesis H6a.

Buy one, get one free deals in the food, household & pets category were more frequently preferred by Polish than by Azerbaijani consumers (Figure 17). Bundling products in the pharmacy, health & wellness category were more frequently preferred by Azerbaijani than by Polish consumers. Polish consumers more frequently preferred none of the promotional deal types in the pharmacy, health & wellness category. Although significant differences were observed in preferences for volume and quantity maximization promotions, the results do not indicate a consistently stronger preference among Azerbaijani consumers. Therefore, the acquired results do not support hypothesis H6b.

Therefore, the umbrella hypothesis H6 is partially supported, validating that preference differences exist but are highly category-dependent.

Figure 17: Differences regarding preferred promotional deal types between the groups of Azerbaijani and Polish consumers.



Source: Author's elaboration

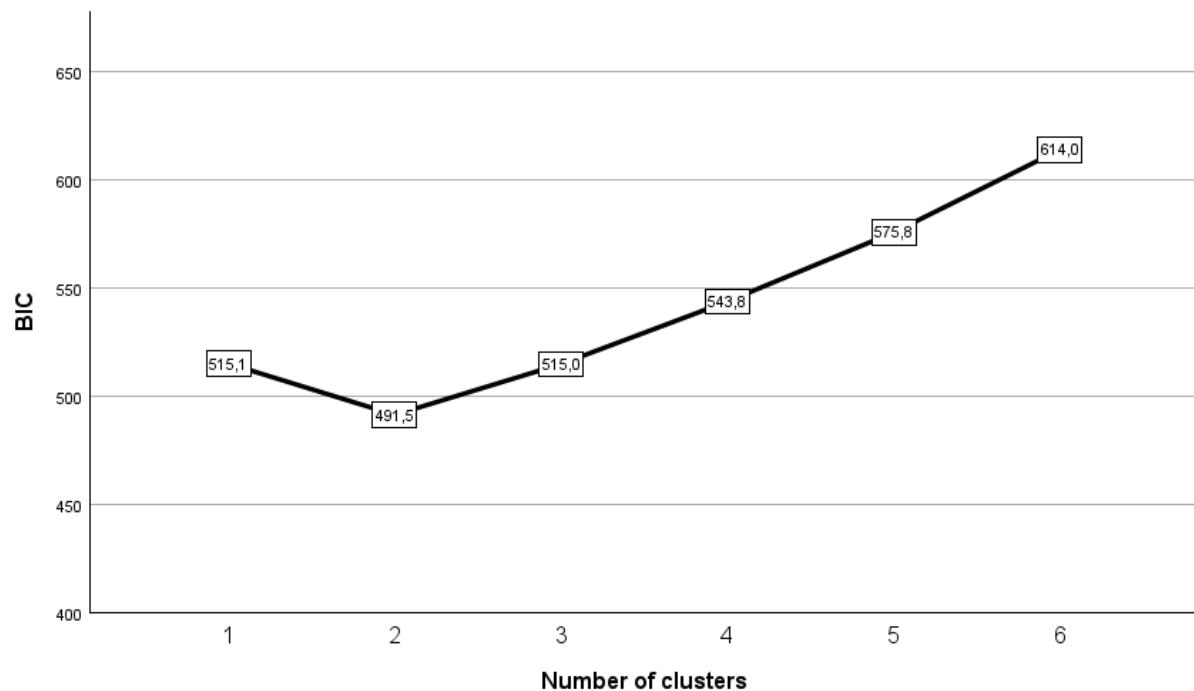
6.2.3 Perception regarding promotions and consumer behaviour

In order to analyze the relationships between perception regarding promotions and consumer behaviour further two-step clustering was applied to perceptions regarding promotions analyzed previously in tables 21-26. The analysis was performed twice, for the pandemic and the post-pandemic period. This analysis allowed for extracting groups of participants differing in profiles of promotions perception. However, participants only evaluated promotion types they have encountered and for the analysis the whole set for evaluations of all promotion types were needed. Therefore, only the results of participants who have encountered and evaluated all promotion types were included in the analysis.

The optimal number of clusters for the pandemic period was determined using the Bayesian Information Criterion (BIC). This criterion is used for model selection among a finite set of models, where the lowest BIC value is preferred because it represents the most parsimonious balance between model fit and complexity (Schwarz, 1978). As illustrated in Figure 18, the BIC values were calculated for solutions ranging from one to six clusters. The results showed a U-shaped distribution, with the lowest BIC value of 491.5 occurring for the two-cluster solution. While the BIC increased for three or more clusters, which suggests a risk of overfitting, the initial drop from one to two clusters indicated a significant improvement in how the data is

represented. This indicates that the two-cluster solution provides the most efficient representation of differences in consumer perceptions of promotional tools. In other words, consumers in the sample can be meaningfully divided into two groups that differ primarily in the overall attractiveness they assign to promotional incentives.

Figure 18: Bayesian Information Criterion values depending on the number of clusters extracted for the pandemic period

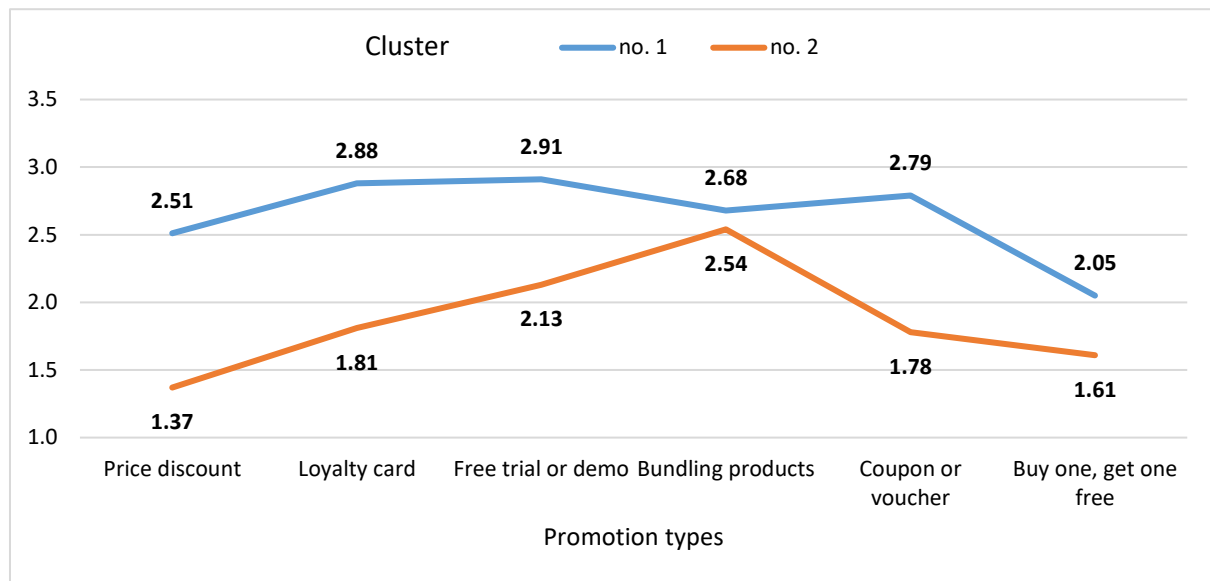


Source: Author's elaboration

The two-cluster solution identified through the BIC analysis reveals two distinct groups based on how attractive they find different promotional deals. As shown in Figure 19, the clusters are primarily separated by the intensity of their evaluations across all categories.

Cluster 1 (High Interest): This group, indicated by the blue line, represents participants who find promotional deals more attractive overall. They assigned consistently higher scores, showing a particularly strong preference for Free trials or demos (2.91) and Loyalty cards (2.88).

Figure 19: Profiles of promotion types evaluation in the acquired clusters for the pandemic.



Source: Author's elaboration

Cluster 2 (Low Interest): The orange line represents a group that is generally less interested in these incentives. Their scores are significantly lower, especially for Price discounts (1.37). The only area where their interest nears that of Cluster 1 is Bundling products (2.54), suggesting this specific promotion has a broader appeal even among less engaged consumers.

Table 36 shows that the two clusters identified during the pandemic differ significantly in how they evaluate almost all promotion types. Cluster 1 (n=57) represents a segment that finds promotional deals highly attractive, with the highest mean scores for Free trials or demos (M=2.91) and Loyalty cards (M=2.88). In contrast, Cluster 2 (n=54) consists of participants who find these deals less attractive, particularly Price discounts (M=1.37).

Table 36: Mean values of evaluations regarding promotions in the pandemic period in the acquired clusters

Promotion types	Cluster no. 1			Cluster no. 2				
	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>Z</i>	<i>p</i>
Price discount	2.51	0.54	77.79	1.37	0.49	33.00	1782.0	.001
Loyalty card	2.88	0.83	73.04	1.81	0.73	38.02	2053.0	.001
Free trial or demo	2.91	0.83	69.37	2.13	0.73	41.89	2262.0	.001
Bundling products	2.68	0.85	57.76	2.54	0.93	54.14	2923.5	.528

Coupon or voucher	2.79	0.90	72.07	1.78	0.69	39.04	2108.0	.001
Buy one, get one free	2.05	0.88	63.40	1.61	0.63	48.19	2602.0	.006

M – mean value; *SD* – standard deviation; *MR* – mean rank ; *Z* – Mann-Whitney U test; *p* – statistical significance

Note. *Z* – Mann–Whitney U test is based on ranked individual responses rather than the frequency distributions presented in the table. Frequencies and percentages are reported for descriptive and interpretative purposes only.

Source: Author's elaboration

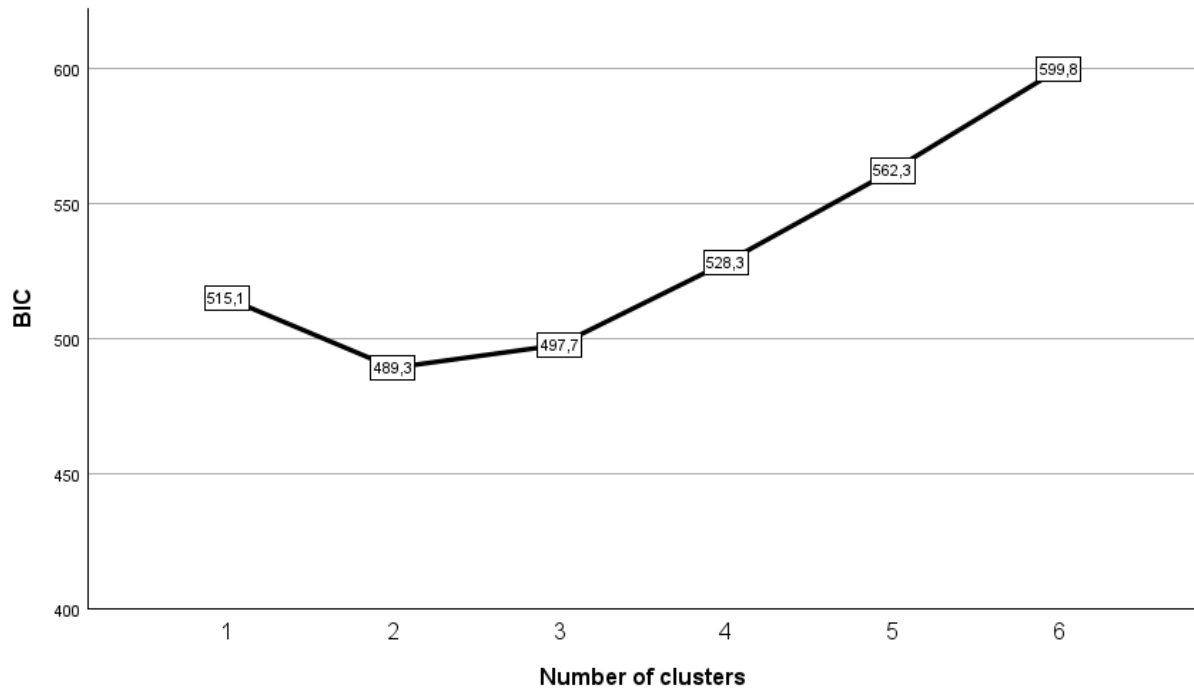
The Mann-Whitney U test is a non-parametric statistical method used to determine if there are significant differences between two independent groups (Mann & Whitney, 1947b). In this study, it was used to validate the two-cluster solution by comparing how participants in Cluster 1 and Cluster 2 evaluated various promotion types. Because the data consists of evaluation scores that may not follow a normal distribution, this test provides a more reliable comparison than a standard t-test. By applying this test, it is possible to confirm whether the "high interest" and "low interest" profiles identified in the cluster analysis represent statistically real behavioural differences.

The Mann-Whitney U test confirms that these differences are statistically significant ($p < .01$) for five out of the six promotions, meaning the groups are distinct segments. The only exception is Bundling products, where the difference is not significant ($p=.528$), indicating that both groups evaluate this specific promotion similarly. This means that while Cluster 1 generally finds these deals more attractive, both groups feel the same about the attractiveness of bundling. Effectively, the results show a clear split between participants with high and low interest in promotions, except for “bundling” offers.

In practical terms, this result indicates that consumers can be broadly categorized into two segments based on their perception of promotions. The first segment consists of consumers who generally perceive promotional incentives as attractive and are therefore more responsive to various promotional tools. The second segment includes consumers who show relatively low interest in promotions overall. The only exception appears to be bundling offers, which were evaluated similarly by both groups, suggesting that this type of promotion may have a broader appeal regardless of general promotional interest.

For the post-pandemic period also two clusters of participants were extracted. As illustrated in Figure 20, the BIC values were calculated for solutions ranging from one to six clusters.

Figure 20: Bayesian Information Criterion values depending on the number of clusters extracted for the post-pandemic period.



Source: Author's elaboration

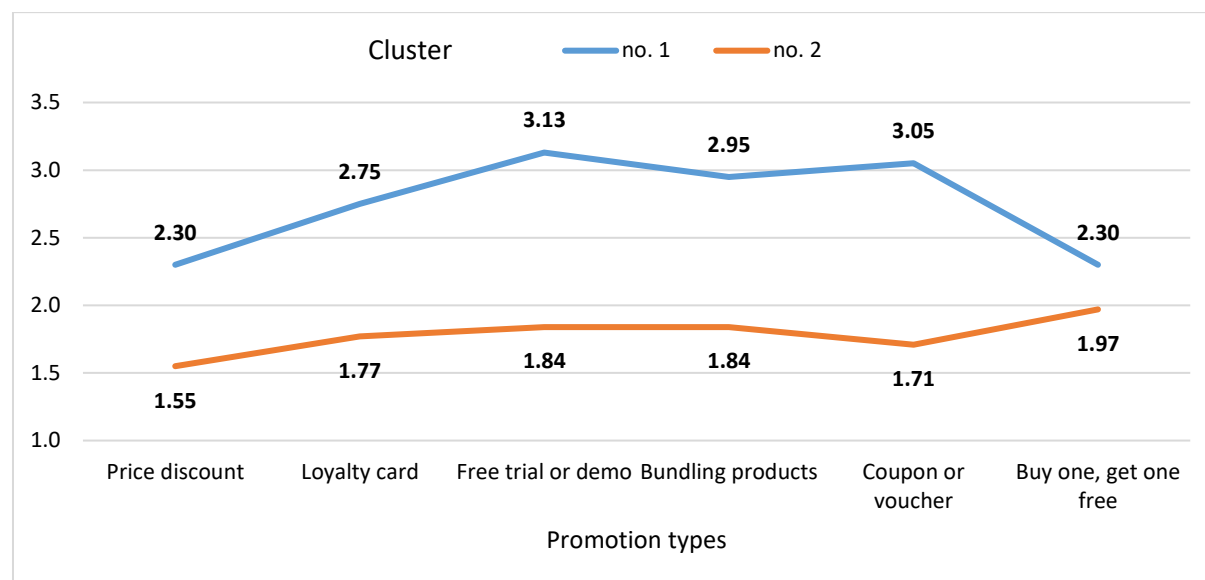
The results showed a U-shaped distribution, with the lowest BIC value of 489,3 occurring for the two-cluster solution. While the BIC increased for three or more clusters (reaching 497,7 for the three-cluster model and continuing upward), the initial drop from the one-cluster value of 515,1 to the two-cluster solution indicated a significant improvement in how the data is represented.

The two-cluster solution was selected because the BIC reached its minimum at this point, which statistically indicates the most efficient balance between model fit and complexity. Selecting the lowest value is necessary to avoid the risk of overfitting. Overfitting occurs when a model becomes too complex by including extra clusters that do not provide meaningful additional insight.

The two-cluster solution identified through the BIC analysis reveals two distinct groups based on how attractive they find different promotional deals in the post-pandemic period. As shown

in Figure 21, the clusters are primarily separated by the intensity of their evaluations across nearly all categories.

Figure 21: Profiles of promotion types evaluation in the acquired clusters for the post-pandemic period.



Source: Author's elaboration

Cluster 1 (High Interest): This group, indicated by the blue line, represents participants who find promotional deals more attractive overall. They assigned consistently higher scores, showing a particularly strong preference for Free trials or demos (2.91) and Loyalty cards (2.88).

Cluster 2 (Low Interest): The orange line represents a group that is generally less interested in these incentives. Their scores are significantly lower, especially for Price discounts (1.37).

The evaluation of Bundling products was the only area where the interest of Cluster 2 (2.54) closely matched that of Cluster 1 (2.68), indicating that this specific promotion maintains a broad appeal regardless of general consumer interest levels.

Table 37 shows that the two clusters identified during the post-pandemic period differ significantly in how they evaluate almost all promotion types. Cluster 1 (n=80) represents a segment that finds promotional deals highly attractive, with the highest mean scores for Free trials or demos (M=3.13) and Coupons or vouchers (M=3.05). In contrast, Cluster 2 (n=31)

consists of participants who find these deals less attractive, particularly Price discounts ($M=1.55$).

Table 37: Mean values of evaluations regarding promotions in the post-pandemic period in the acquired clusters

	Cluster no. 1			Cluster no. 2				
Promotion types	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>Z</i>	<i>p</i>
Price discount	2.30	0.64	64.70	1.55	0.57	33.55	-4.98	.001
Loyalty card	2.75	0.72	65.81	1.77	0.67	30.68	-5.51	.001
Free trial or demo	3.13	0.85	67.39	1.84	0.64	26.60	-6.26	.001
Bundling products	2.95	0.88	65.51	1.84	0.82	31.45	-5.21	.001
Coupon or voucher	3.05	0.90	66.76	1.71	0.82	28.23	-5.86	.001
Buy one, get one free	2.30	0.74	59.23	1.97	0.80	47.68	-1.85	.064

M – mean value; *SD* – standard deviation; *MR* – mean rank ; *Z* – Mann-Whitney U test; *p* – statistical significance

Note. *Z* – Mann–Whitney U test is based on ranked individual responses rather than the frequency distributions presented in the table. Frequencies and percentages are reported for descriptive and interpretative purposes only.

Source: Author’s elaboration

The Mann-Whitney U test confirms that these differences are statistically significant ($p < .01$) for five out of the six promotions, meaning the groups are distinct segments. The only exception is Buy one, get one free, where the difference is not significant ($p=.064$), indicating that both groups evaluate this specific promotion similarly. This means that while Cluster 1 generally finds these deals more attractive, both groups feel the same about the attractiveness of "buy one, get one free" offers. Effectively, the results show a clear split between participants with high and low interest in promotions, except for “buy one, get one free” offers.

This finding suggests that the general structure of consumer perceptions toward promotions remained similar in the post-pandemic period. Consumers can still be divided into groups that differ mainly in the intensity of their interest in promotions rather than in fundamentally different preferences. However, the fact that “buy one, get one free” offers were evaluated

similarly by both groups indicates that certain promotional formats may have universal appeal across different consumer segments.

Table 38 shows the distribution of the cluster membership regarding the post-pandemic period depending on the cluster membership regarding the pandemic period.

Table 38: Distribution of the cluster membership regarding the post-pandemic period depending on the cluster membership regarding the pandemic period for consumer perception

Pandemic period						
Cluster	no. 1		no. 2		Total	
Post-pandemic	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
no. 1	54	94.7	26	48.1	80	72.1
no. 2	3	5.3	28	51.9	31	27.9
Total	57	100	54	100	111	100

n – number of participants; % - group percentage

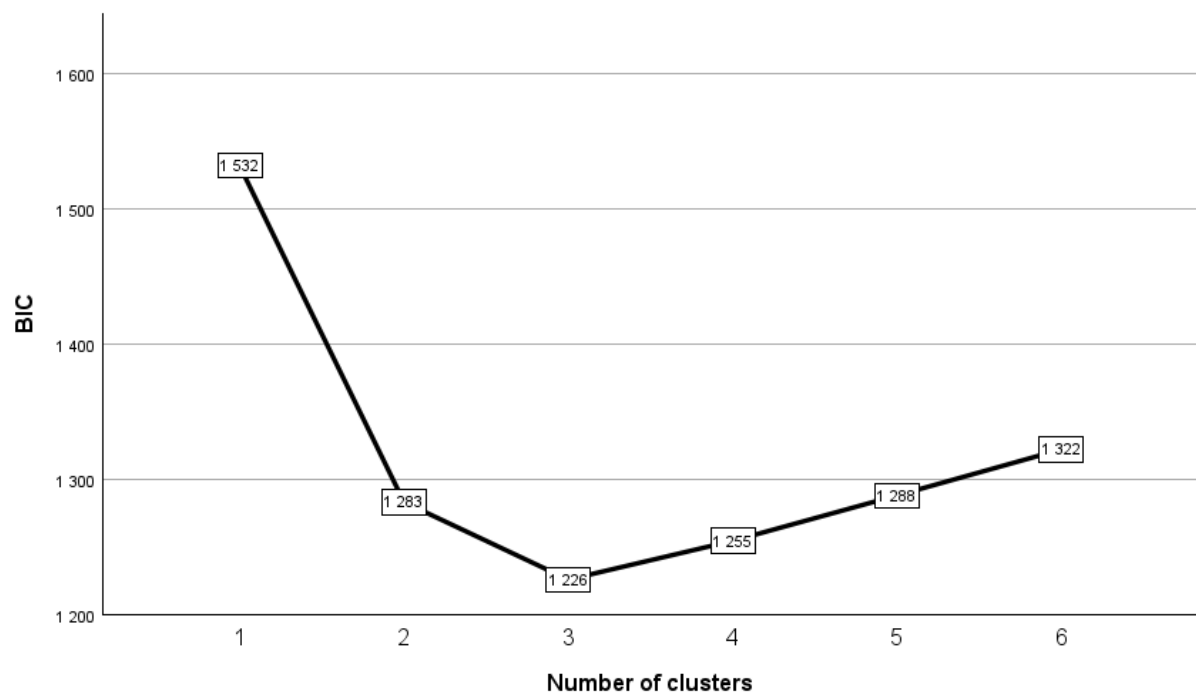
Source: Author's elaboration

The analysis of Table 38 demonstrates a significant longitudinal link between consumer perceptions across the two time periods, as evidenced by the Pearson's chi-squared test results, $\chi^2(1) = 29.90$, $p < .001$. This statistical significance justifies the conclusion that cluster membership is not random; instead, a participant's attitude toward promotions during the pandemic serves as a strong foundation for their post-pandemic behaviour. While the "High Interest" segment (Cluster 1) showed remarkable stability with 94.7% of members remaining in the same group, the "Low Interest" segment (Cluster 2) experienced a major shift, with 48.1% of its members migrating into the high-interest category. This transition suggests that the post-pandemic environment acted as a catalyst, making nearly half of the previously indifferent consumers significantly more receptive to promotional deals. From a broader perspective, this result suggests that the pandemic may have contributed to long-term changes in consumer sensitivity to promotions. Even consumers who initially showed relatively low interest in promotional offers became more receptive to them in the post-pandemic period. This may reflect increased price awareness, changes in purchasing habits, or greater familiarity with promotional mechanisms developed during the pandemic. To further validate if these changing perceptions translated into tangible actions, the same clustering methodology was applied to

the consumer behaviours from tables 91-94, allowing for a precise extraction of behavioural profiles for both periods.

For the pandemic period three clusters of participants were extracted. The decision regarding the number of clusters was based on Bayesian Information Criterion value, which was lowest for the solution based on three clusters (see Figure 22). Silhouette measure of cohesion and separation was equal to 0.3.

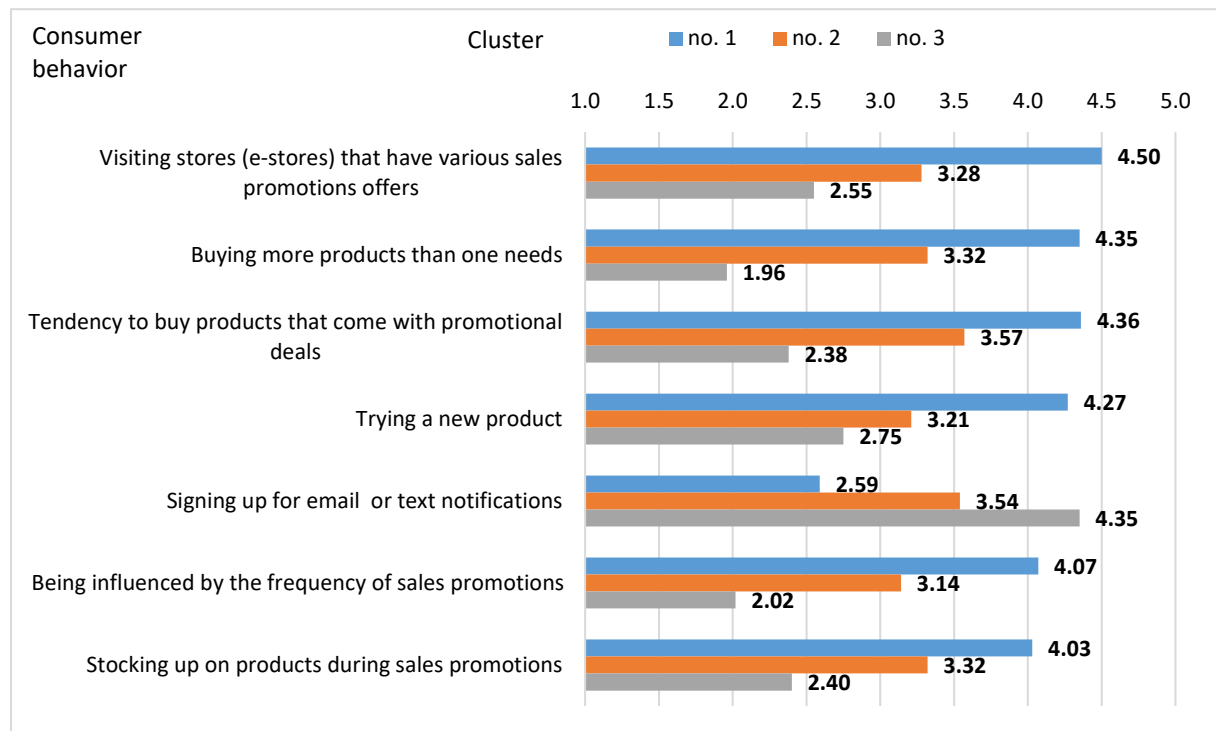
Figure 22: Bayesian Information Criterion values depending on the number of clusters extracted.



Source: Author's elaboration

The three-cluster solution identified through the BIC analysis reveals distinct behavioural profiles based on how consumers reacted to promotional activities during the pandemic period. As shown in Figure 23, the groups are differentiated by their shopping habits, receptivity to frequency of promotions, and communication preferences.

Figure 23: Profiles of consumer behaviours during the pandemic period.



Source: Author's elaboration

Cluster 1 (High Promotion Engagement): This group, represented by the blue bars, shows the highest overall engagement with promotional behaviours. They are characterized by a very strong tendency to visit stores specifically for sales promotions (4.50), buy more products than needed (4.35), and deliberately seek out products that come with promotional deals (4.36).

Cluster 2 (Moderate Promotion Engagement): Represented by the orange bars, this group displays moderate levels of engagement across most categories. While they are influenced by promotions, their scores are consistently lower than Cluster 1, such as in visiting stores for promotions (3.28) and stocking up on products (3.32).

Cluster 3 (Low Promotion Engagement): The grey bars represent a unique segment that generally shows the lowest behavioural response to promotions, particularly in being influenced by promotion frequency (2.02) and buying more than needed (1.96). However, this group shows the highest score for signing up for email or text notifications (4.35), suggesting a preference for digital information over immediate impulsive purchasing.

Table 39 shows that the three clusters identified during the pandemic differ significantly in their engagement with every measured consumer behaviour. The Kruskal-Wallis H test was employed as a non-parametric alternative to the one-way ANOVA, as it is specifically designed

to determine significant differences between three or more independent groups when the data may not meet the assumption of a normal distribution (Kruskal & Wallis, 1952). The Kruskal–Wallis test was used to determine whether the three behavioural clusters differ significantly in their responses to promotional activities. This test is a non-parametric alternative to one-way ANOVA and is suitable when comparing more than two independent groups. In this study, the test evaluates whether consumers belonging to different behavioural clusters demonstrate significantly different levels of engagement with promotional behaviours.

Table 39: Mean values for consumer behaviours in the pandemic period in the acquired clusters

	Cluster no. 1			Cluster no. 2			Cluster no. 3				
Consumer behaviours	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>H</i>	<i>p</i>
Visiting stores (e-stores) that have various sales promotions offers	4.50	.58	228.81	3.28	.81	126.02	2.55	.88	72.65	148.49	.001
Buying more products than one needs	4.35	.61	224.43	3.32	.79	138.19	1.96	.77	48.55	164.63	.001
Tendency to buy products that come with promotional deals	4.36	.54	217.41	3.57	.66	140.76	2.38	.83	54.52	145.78	.001
Trying a new product	4.27	.66	215.37	3.21	.84	125.21	2.75	1.17	99.23	96.14	.001
Signing up for email or text notifications	2.59	1.19	98.74	3.54	1.04	160.09	4.35	.89	219.33	76.04	.001
Being influenced by the frequency of sales promotions	4.07	.61	219.59	3.14	.79	138.43	2.02	.81	56.72	143.06	.001

Stocking up on products during sales promotions	4.03	.77	202.15	3.32	.86	142.10	2.40	1.07	78.73	81.31	.001
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M – mean value; *SD* – standard deviation; *MR* – mean rank; *H* – Kruskal-Wallis H test; *p* – statistical significance

Note. Kruskal-Wallis test is not based on the difference between the mean values. They depicted for illustrative purpose only.

Source: Author's elaboration

This test confirms that these behavioural profiles represent statistically distinct segments, as indicated by the significance levels ($p < .001$) across all variables. Cluster 1 ($n=75$) represents a highly active segment characterized by a strong tendency to visit stores for promotions ($M=4.50$) and buy more products than needed ($M=4.35$). In contrast, Cluster 2 ($n=81$) displays moderate behavioural responses, such as a balanced tendency to try new products ($M=3.21$). Cluster 3 ($n=60$) consists of participants who are the least influenced by the frequency of promotions ($M=2.02$) and show the lowest inclination to stock up on goods ($M=2.40$), yet they are the most receptive to digital communication, as evidenced by their high mean score for signing up for email or text notifications ($M=4.35$). Effectively, the application of this test validates that the split between groups driven by physical purchase incentives and the group prioritizing digital information represents a statistically real divergence in consumer behaviour. In practical terms, these results suggest that consumers differed substantially in how strongly they responded to promotional activities during the pandemic. While some consumers actively searched for promotions and increased their purchasing when promotions were available, others showed only moderate engagement or minimal behavioural response. Interestingly, the group with the lowest purchasing response still demonstrated a strong tendency to subscribe to promotional notifications, indicating that access to promotional information does not necessarily translate into increased purchasing behaviour.

Table 40 provides a detailed post-hoc verification of the differences between the three acquired clusters through pairwise comparisons using the Mann-Whitney U test. This secondary analysis

is essential because while the Kruskal-Wallis test identifies overall significance, the Mann-Whitney U test specifies exactly which pairs of groups differ from one another.

Table 40: Verification of differences between acquired clusters regarding consumer behaviours

	Pairs of clusters compared					
	no. 1 – no. 2		no. 1 – no. 3		no. 2 – no. 3	
Consumer behaviours	<i>Z</i>	<i>p</i>	<i>Z</i>	<i>p</i>	<i>Z</i>	<i>p</i>
Visiting stores (e-stores) that have various sales promotions offers	-10.32	.001	-9.70	.001	-5.19	.001
Buying more products than one needs	-9.35	.001	-10.21	.001	-8.54	.001
Tendency to buy products that come with promotional deals	-8.45	.001	-9.88	.001	-8.05	.001
Trying a new product	-8.88	.001	-7.52	.001	-2.62	.009
Signing up for email or text notifications	-5.98	.001	-7.69	.001	-5.06	.001
Being influenced by the frequency of sales promotions	-8.58	.001	-9.98	.001	-7.52	.001
Stocking up on products during sales promotions	-6.06	.001	-7.94	.001	-5.43	.001

Z – Mann-Whitney U test; *p* – statistical significance

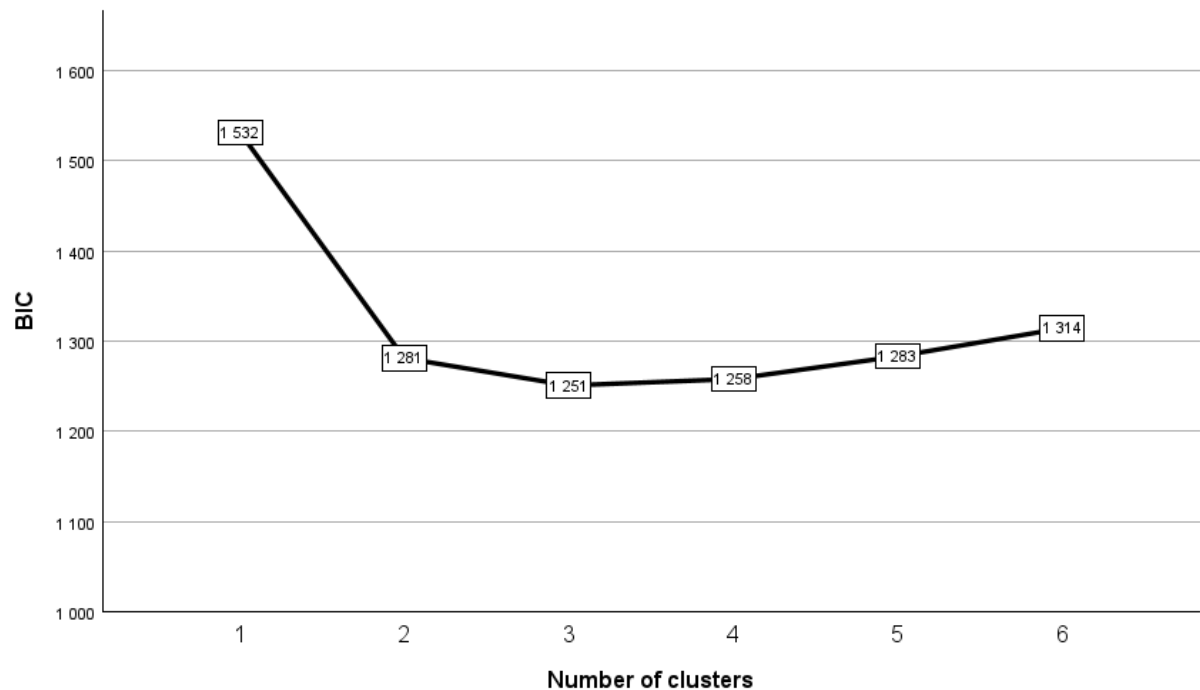
Source: Author's elaboration

The results confirm that the differences between all cluster pairs (no. 1 – no. 2, no. 1 – no. 3, and no. 2 – no. 3) are statistically significant ($p < .01$) for every measured consumer behaviour. These evaluations followed a consistent hierarchy across all categories: behaviours were most frequent in Cluster 1 ($n=100$), followed by Cluster 2 ($n=145$), and were lowest in Cluster 3 ($n=55$). This systematic divergence validates that the three clusters represent distinct levels of behavioural engagement, with the strongest differentiation often found between the high-engagement Cluster 1 and the low-engagement Cluster 3, as evidenced by the extremely low U-values in that comparison.

As illustrated in Figure 24, the Bayesian Information Criterion (BIC) values were calculated for potential solutions ranging from one to six clusters, revealing a U-shaped distribution with

an absolute minimum BIC of 1251 for a three-cluster solution. However, a two-cluster solution (BIC = 1281) was ultimately selected to prioritize the Silhouette measure of cohesion and separation, which reached a more robust value of 0.4.

Figure 24: Bayesian Information Criterion values depending on the number of clusters extracted for consumer behaviours in the post-pandemic period.

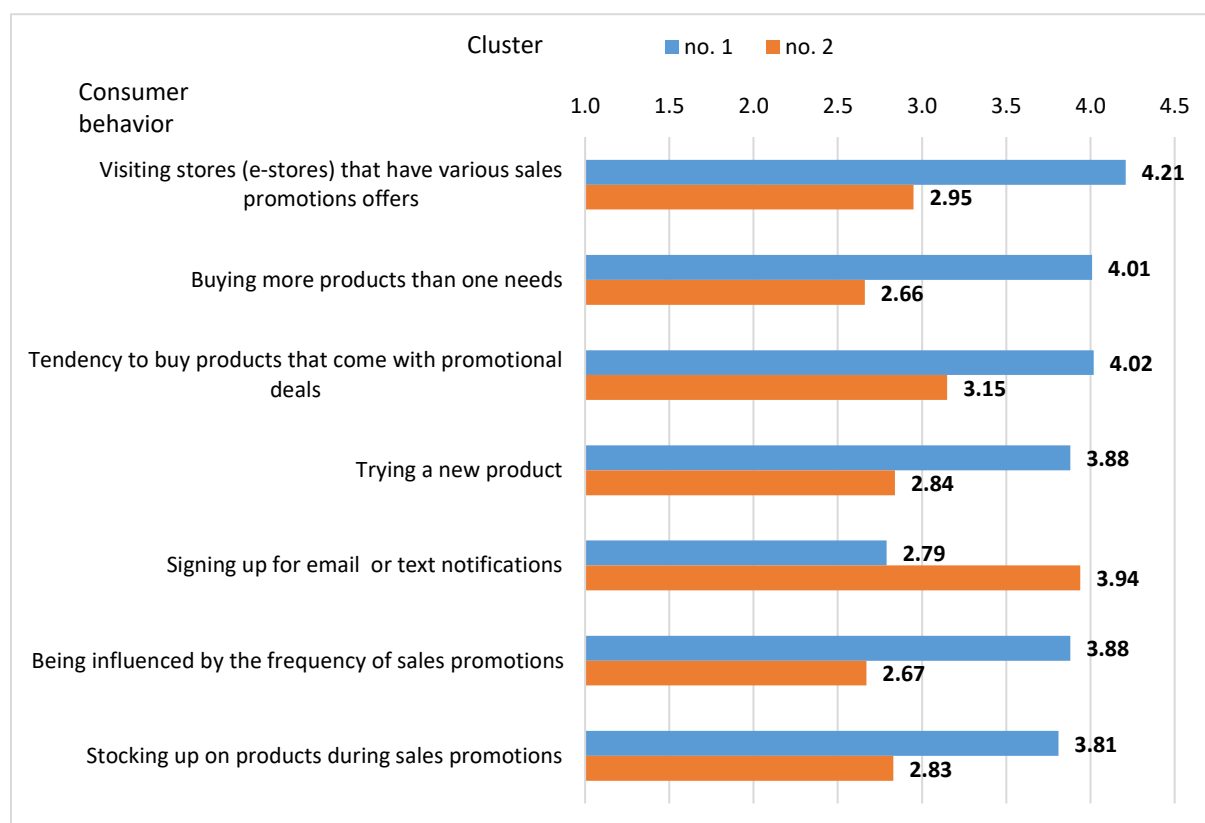


Source: Author's elaboration

This methodological choice is justified because a higher Silhouette value indicates a clearer and more meaningful separation of post-pandemic consumer behaviours, effectively avoiding the risk of over-segmentation and ensuring the model captures the most distinct behavioural profiles.

As shown in Figure 25, the two-cluster solution identified for the post-pandemic period reveals two distinct behavioural segments, primarily separated by the intensity of their physical versus digital engagement with promotions.

Figure 25: Profiles of consumer behaviours during the post-pandemic period.



Source: Author's elaboration

Cluster 1 (High Promotion Engagement): Indicated by the blue bars, this group represents participants who exhibit high levels of active shopping behaviours. They show a strong preference for visiting stores with sales promotions (4.21), buying more products than needed (4.01), and specifically seeking out products with promotional deals (4.02).

Cluster 2 (Low Promotion Engagement): The orange bars represent a group that is generally less influenced by the frequency of sales promotions (2.67) and less likely to buy extra products (2.66). However, similar to the pattern observed in the pandemic period, this group shows their highest score in signing up for email or text notifications (3.94), which actually exceeds the interest shown by Cluster 1 (2.79) in this specific area.

Table 41 depicts the mean values of evaluations in the acquired clusters with the values of Mann-Whitney U test.

Table 41: Mean values for consumer behaviours in the post-pandemic period in the acquired clusters

	Cluster no. 1		Cluster no. 2			
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Consumer behaviours	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>M</i>	<i>SD</i>	<i>MR</i>	<i>Z</i>	<i>p</i>
Visiting stores (e-stores) that have various sales promotions offers	4.21	0.63	201.87	2.95	0.89	95.59	-11.19	.001
Buying more products than one needs	4.01	0.62	204.27	2.66	0.93	93.02	-11.70	.001
Tendency to buy products that come with promotional deals	4.02	0.65	187.64	3.15	0.95	110.8	-8.26	.001
Trying a new product	3.88	0.79	189.86	2.84	1.02	108.42	-8.50	.001
Signing up for email or text notifications	2.79	1.15	111.85	3.94	0.98	191.82	-8.20	.001
Being influenced by the frequency of sales promotions	3.88	0.67	199.64	2.67	0.91	97.98	-10.65	.001
Stocking up on products during sales promotions	3.81	0.87	188.83	2.83	0.98	109.53	-8.26	.001

M – mean value; *SD* – standard deviation; *MR* – mean rank; *Z* – Mann-Whitney U test; *p* – statistical significance

Source: Author's elaboration

The extracted clusters differed regarding all consumer behaviours. The evaluations of all consumer behaviours were significantly higher in the group of participants from cluster no. 1 ($n=155$) than in the group of participants from cluster no. 2 ($n=145$).

These findings indicate that even after the pandemic, consumers continued to differ significantly in their level of engagement with promotional activities. Some consumers remained highly responsive to promotions and actively adjusted their purchasing behaviour when promotional incentives were available, while others showed considerably lower behavioural responses. However, similar to the pandemic period, consumers with lower purchasing engagement still demonstrated relatively high interest in receiving promotional information through digital communication channels.

As illustrated in Table 42, the distribution of cluster membership reveals significant shifts in behavioural patterns over time.

Table 42: Distribution of the cluster membership regarding the post-pandemic period depending on the cluster membership regarding the pandemic period for consumer behaviours

	Pandemic period					
Cluster	no. 1		no. 2		no. 3	
Post-pandemic	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
no. 1	91	91.0	57	39.3	7	12.7
no. 2	9	9.0	88	60.7	48	87.3
Total	100	100	145	100	55	100

n – number of participants; % - group percentage

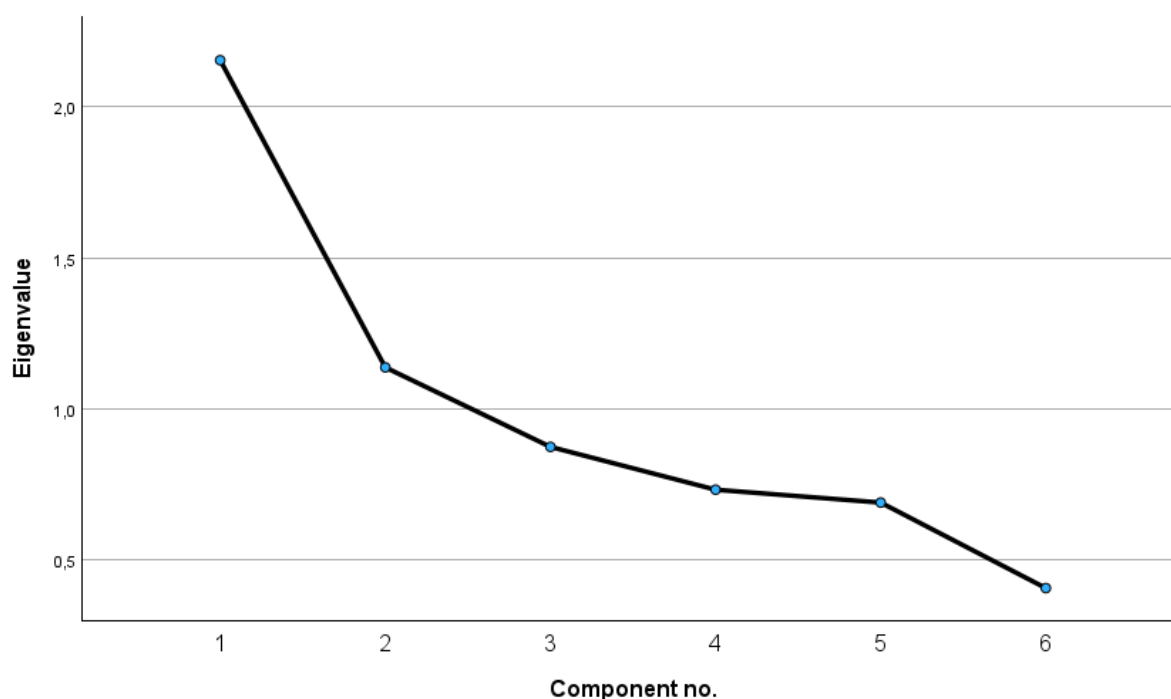
Source: Author's elaboration

According to the value of Pearson's chi-squared test the association between the two periods regarding cluster membership was statistically significant, $\chi^2(2)=104.21$, $p<.001$. Majority of participants from cluster no. 1 (evaluating all consumer behaviours highest) regarding the pandemic period was also included in cluster no. 1 regarding the post-pandemic period (evaluating all consumer behaviours higher). Also, 60.7% of the participants from cluster no. 2 (evaluating consumer behaviours lower) and 87.3% participants from cluster no. 3 (evaluating consumer behaviours lowest) were included in the cluster no. 2 regarding the post-pandemic period (evaluating consumer behaviours lower). In comparison with previous analysis regarding perceptions (see Table 38) it appears that participants were more stable in their consumer behaviours than perceptions.

The analysis of profiles regarding both perceptions and behaviours suggests that perceptions are homogeneous and the consumer behaviours are homogeneous as well. However, in order to verify it further, Principal Component Analysis was applied to the results acquired.

Figure 26 depicts the scree plot acquired for perceptions regarding promotions in the pandemic period.

Figure 26: Scree plot acquired for perceptions regarding promotions in the pandemic period.



Source: Author's elaboration

On the basis of the scree plot and Kaiser criterion two components were extracted. Table 43 presents factors loadings acquired.

Table 43: Factor loadings for perceptions regarding sales promotions in the pandemic period

Promotion types	Component	
	1	2
Price discount	.87	-
Loyalty card	.65	-
Free trial or demo	-	.71
Bundling products	-	.84
Coupon or voucher	.52	.33
Buy one, get one free	.59	-

Note. Values below .30 are not shown.

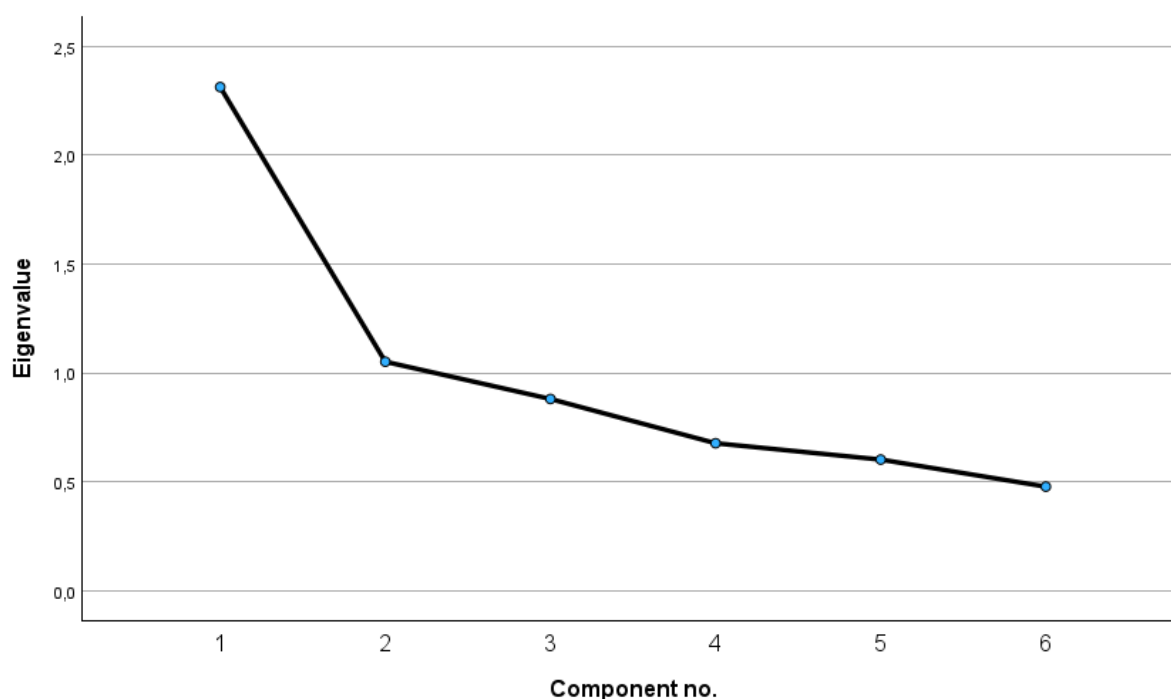
Source: Author's elaboration

Component 1 was saturated by rating price discounts, loyalty cards, coupon or vouchers and “Buy one, get one free” as attractive. Component 2 was saturated by rating free trial or demos, bundling products and coupons or vouchers as attractive. This structure suggests that consumers

may perceive promotional tools in two broader conceptual categories. The first component primarily includes traditional price-related promotions such as discounts, loyalty cards, and buy-one-get-one-free offers. The second component captures promotions that provide additional value or experience, such as free trials or product bundling. This distinction indicates that consumers may evaluate promotions not only based on price discounts but also on perceived added value or product experience.

Figure 27 depicts the scree plot acquired for perceptions regarding promotions in the post-pandemic period.

Figure 27: Scree plot acquired for perceptions regarding promotions in the post-pandemic period.



Source: Author's elaboration

On the basis of the scree plot and Kaiser criterion also two components were extracted. Table 44 presents factors loadings acquired.

Table 44: Factor loadings for perceptions regarding sales promotions in the post-pandemic period.

	Component
--	-----------

Promotion types	1	2
Price discount	-	.91
Loyalty card	-	.65
Free trial or demo	.72	-
Bundling products	.81	-
Coupon or voucher	.68	-
Buy one, get one free	.55	-

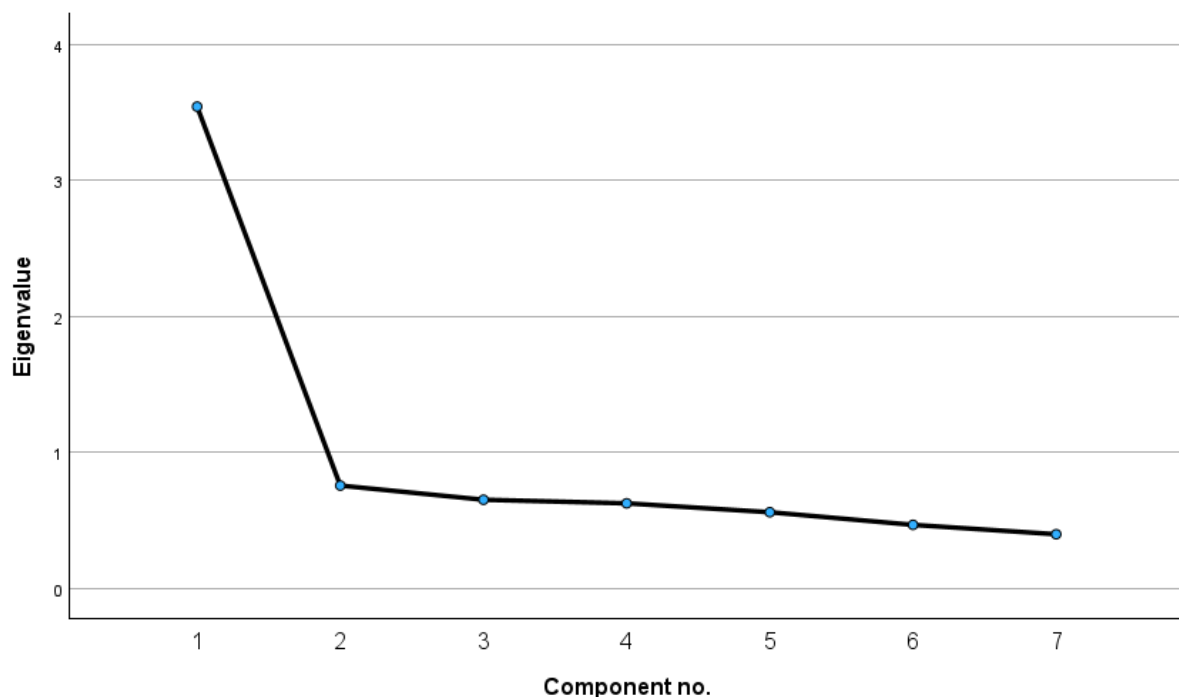
Note. Values below .30 are not shown.

Source: Author's elaboration

Component 1 was saturated by rating free trial or demos, bundling products and coupons or vouchers and “Buy one, get one free” as attractive. Component 2 was saturated by rating price discounts and loyalty cards as attractive. as attractive.

Figure 28 depicts the scree plot acquired for consumer behaviours in the pandemic period.

Figure 28: Scree plot acquired for consumer behaviours in the pandemic period.



Source: Author's elaboration

On the basis of the scree plot and Kaiser criterion just one component was extracted. Table 45 presents factors loadings acquired.

Table 45: Factor loadings for consumer behaviours in the pandemic period.

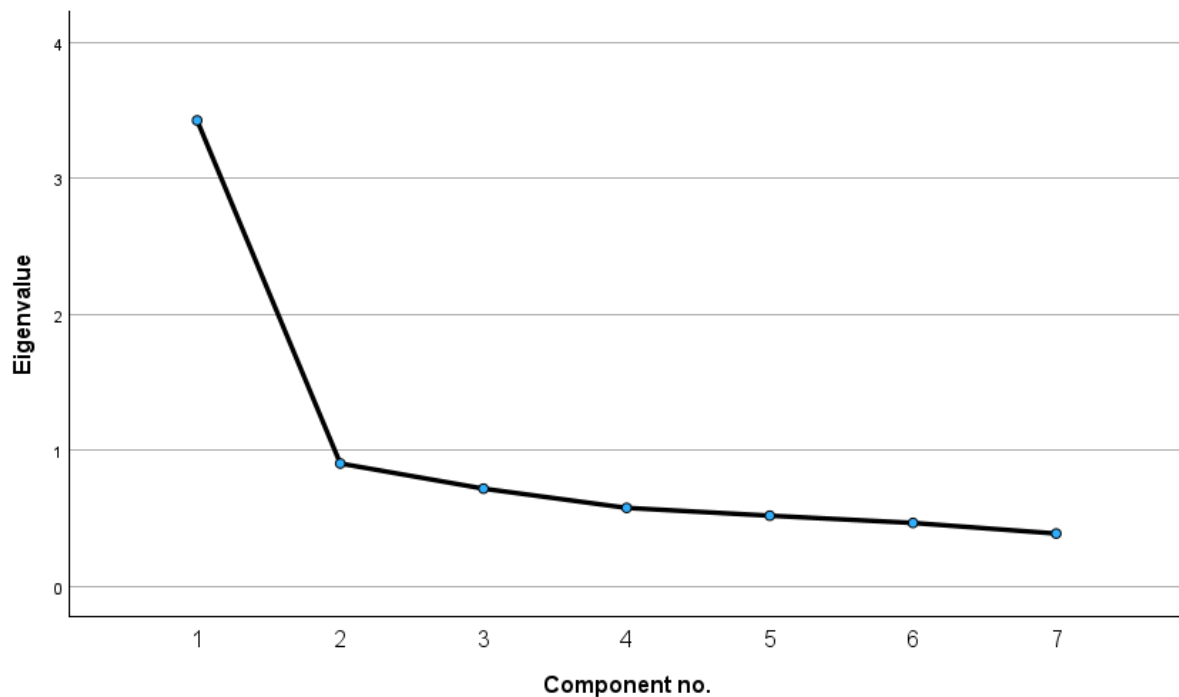
Consumer behaviours	
Visiting stores (e-stores) that have various sales promotions offers	.74
Buying more products than one needs	.75
Tendency to buy products that come with promotional deals	.78
Trying a new product	.66
Signing up for email or text notifications	-.64
Being influenced by the frequency of sales promotions	.74
Stocking up on products during sales promotions	.64

Source: Author's elaboration

Signing up for email or text notifications was related negatively to other consumer behaviours in the pandemic period, therefore it was removed from the final extracted component.

Figure 29 depicts the scree plot acquired for consumer behaviours in the post-pandemic period.

Figure 29: Scree plot acquired for consumer behaviours in the post-pandemic period.



Source: Author's elaboration

On the basis of the scree plot and Kaiser criterion just one component was extracted. Table 46 presents factors loadings acquired.

Table 46: Factor loadings for consumer behaviours in the post-pandemic period.

Consumer behaviours	
Visiting stores (e-stores) that have various sales promotions offers	.76
Buying more products than one needs	.80
Tendency to buy products that come with promotional deals	.73
Trying a new product	.65
Signing up for email or text notifications	-.54
Being influenced by the frequency of sales promotions	.76
Stocking up on products during sales promotions	.62

Source: Author's elaboration

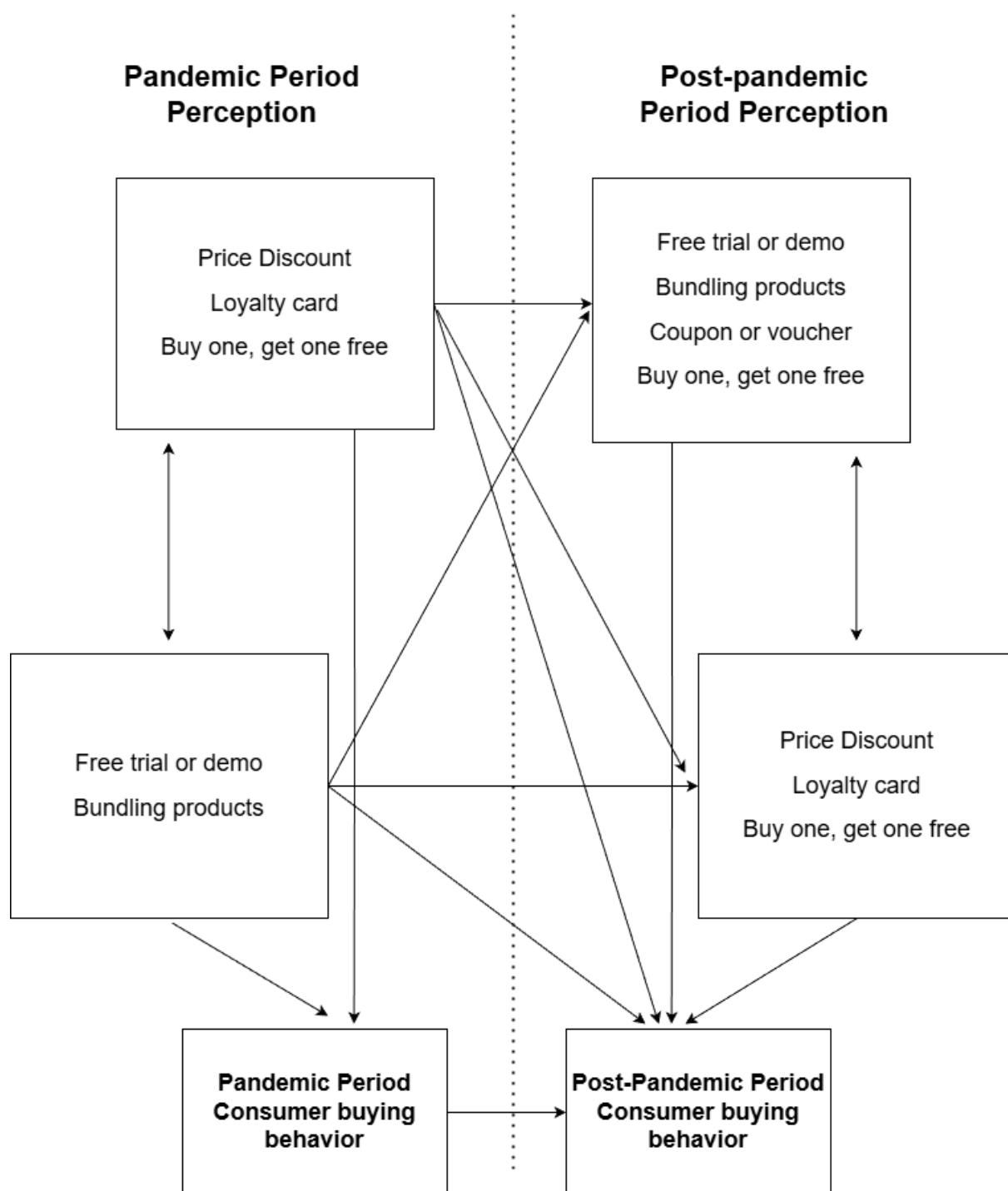
Signing up for email or text notifications was related negatively to other consumer behaviours also in the post-pandemic period, therefore it was removed from the final extracted component.

The component scores for the purpose of further analysis were calculated with the use of regression method. The two components of sales promotion perceptions in the pandemic period correlated positively with each other, $r(109)=.210$, $p<.05$. Also, the two components of promotion perceptions in the post-pandemic period correlated positively with each other, $r(109)=.256$, $p<.01$.

The component scores were included in the path analysis based on Maximum Likelihood with Robust standard errors method. This Analysis was performed on the total sample of 300

participants. Due to limited sample size it was not performed in the Polish and in the Azerbaijani group separately. The preliminary model is depicted in Figure 30.

Figure 30: Preliminary model of relationships between promotion perceptions and consumer behaviour.



Note. ♦ Two directional arrow means covariance.

Source: Author's elaboration

The preliminary path analysis model was developed to examine how perceptions of promotional tools and consumer behaviours during the pandemic influence perceptions and behaviours in the post-pandemic period. Path analysis allows the simultaneous examination of multiple relationships between variables and helps identify both direct and indirect influences among them. The model therefore tests several theoretical assumptions about how consumer perceptions and behaviours evolve over time.

Specifically, the model examines three types of relationships. First, it tests whether perceptions of promotional tools during the pandemic influence perceptions of promotions in the post-pandemic period, which would indicate stability in consumer attitudes. Second, it evaluates whether consumer behaviour during the pandemic influences later perceptions of promotional incentives, suggesting that behavioural experience with promotions may shape subsequent attitudes. Third, it examines whether perceptions of promotions influence consumer behaviour either during the pandemic or afterwards.

The preliminary model includes all theoretically possible relationships between the variables in order to identify which relationships are statistically meaningful. Some of these paths were found to be statistically insignificant, indicating that certain hypothesized relationships are not supported by the data. These insignificant relationships were therefore removed in order to construct a more parsimonious final model.

Table 47 depicts regression coefficients and correlation coefficients acquired in the preliminary model.

Table 47: Relationships between variables in the preliminary model

Relationships				
Pandemic		Post-Pandemic	<i>Beta</i>	<i>p</i>
Price discount, Loyalty card, Buy one, get one free pandemic	->	Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free post-pandemic	.09	.374
Free trial or demo, Bundling products pandemic	->	Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free post-pandemic	.68	.001

Consumer behaviour pandemic	->	Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free post-pandemic	.29	.003
Price discount, Loyalty card, Buy one, get one free pandemic	->	Price discount, Loyalty card post-pandemic	.64	.001
Free trial or demo, Bundling products pandemic	->	Price discount, Loyalty card post-pandemic	.17	.005
Consumer behaviour pandemic	->	Price discount, Loyalty card post-pandemic	-.02	.764
Price discount, Loyalty card, Buy one, get one free pandemic	->	Consumer behaviour post-pandemic	.06	.610
Free trial or demo, Bundling products pandemic	->	Consumer behaviour post-pandemic	.05	.567
Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free post-pandemic	->	Consumer behaviour post-pandemic	-.18	.115
Price discount, Loyalty card post-pandemic	->	Consumer behaviour post-pandemic	-.12	.220
Consumer behaviour pandemic	->	Consumer behaviour post-pandemic	.73	.001
Price discount, Loyalty card, Buy one, get one free pandemic	->	Consumer behaviour pandemic	-.65	.001
Free trial or demo, Bundling products pandemic	->	Consumer behaviour pandemic	-.07	.343
			<i>r</i>	<i>p</i>
Price discount, Loyalty card, Buy one, get one free pandemic	<- >	Free trial or demo, Bundling products pandemic	.21	.060

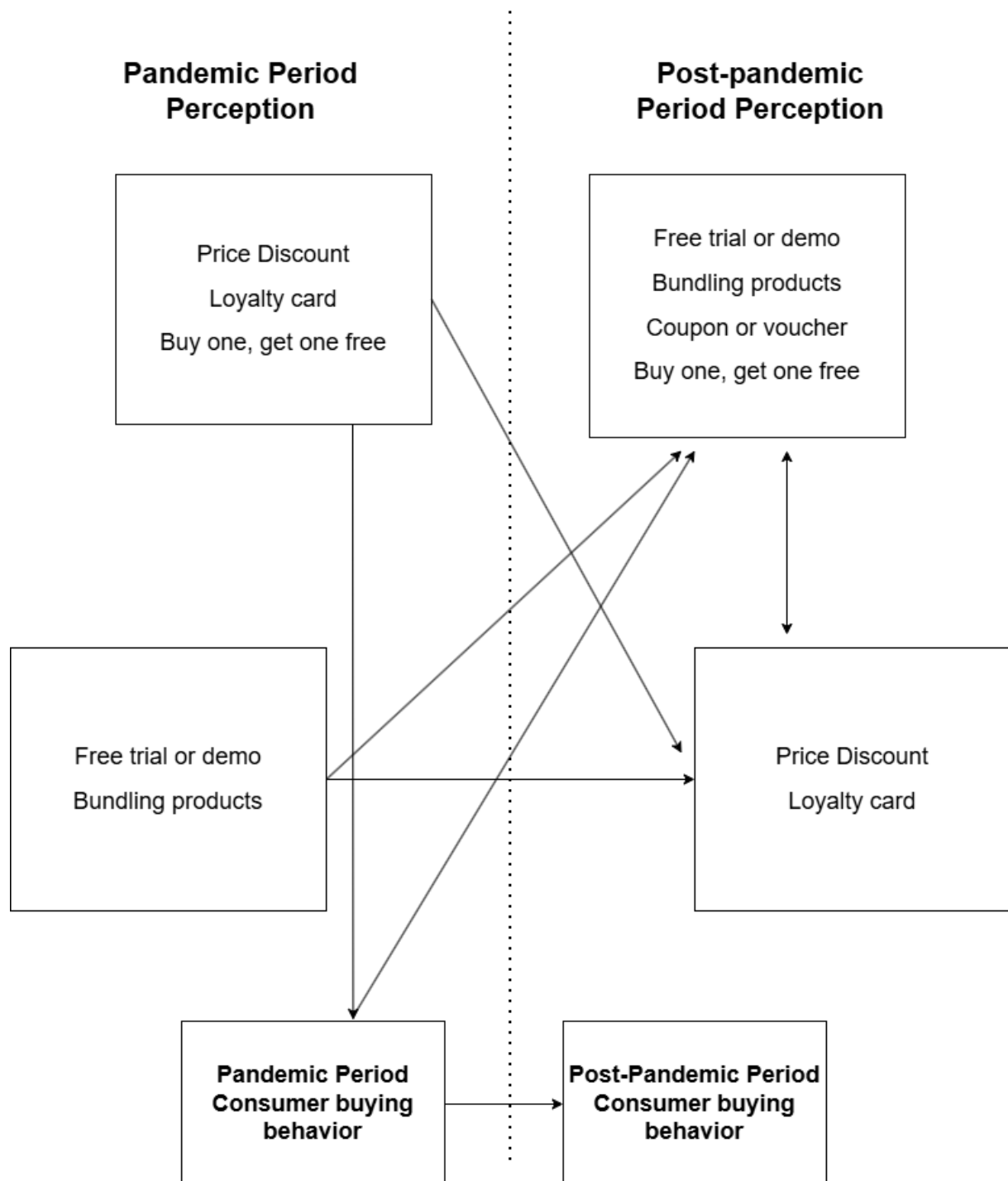
Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free post-pandemic	<- >	Price discount, Loyalty card post-pandemic	.24	.042
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Beta – standardized regression coefficient; r – Pearson correlation coefficient; p – statistical significance

Source: Author's elaboration

The relationships between rating Price discount, Loyalty card, Buy one, get one free promotions in the pandemic period and rating Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free as attractive in the post-pandemic period, between consumer behaviour in the pandemic period and rating Price discount, Loyalty card promotions as attractive, between both factors of perception in both the pandemic period and post-pandemic period and consumer behaviour in the post-pandemic period, and between rating Free trial or demo, Bundling products promotions as attractive in the pandemic period and consumer behaviour in the pandemic period were statistically insignificant. Also, the correlation between the factors of perception was statistically insignificant. The statistically insignificant relationships were removed from the final model, which is depicted in Figure 31.

Figure 31: Final model of relationships between promotion perceptions and consumer behaviour.



Note. ♦ Two directional arrow means covariance.

Source: Author's elaboration

Table 48 depicts regression coefficients and correlation coefficients acquired in the final model. The fit indices indicated the final model fit to the analyzed data to be very close. The values of the indices were equal to $CFI=.99$, $RMSEA=.01$ and $SRMR=.05$.

The only statistically significant behaviour of consumer behaviour in the post-pandemic period was consumer behaviour in the pandemic period, which is consistent with the previous analysis indicating stability in consumer behaviour (see Table 42). The higher the level of consumer behaviour in the pandemic period the higher the level of consumer behaviour in the post-pandemic period. What is more, consumer behaviour in the pandemic period was significantly related to rating of Free trial or demo, Bundling products, Coupon or voucher, and Buy one, get one free promotions in the post-pandemic period. The higher the level of consumer behaviour in the pandemic period the higher ratings for these promotions in the post-pandemic period. Rating Free trial or demo, Bundling products as attractive in the pandemic period was related to both factors of perception in the post-pandemic period. The rating of Price discount, Loyalty card, and Buy one, get one free promotions in the pandemic period was related positively to the rating of Price discount, Loyalty card promotions in the post-pandemic period. The rating of Price discount, Loyalty card, and Buy one, get one free promotions was related negatively to consumer behaviour, but in the pandemic period only. The higher the rating of Price discount, Loyalty card, and Buy one, get one free promotions the lower the level of consumer behaviour in the pandemic period. The factors of perception in the post-pandemic period correlated positively with each other.

Table 48: Relationships between variables in the final model

Relationships				
Pandemic		Post-Pandemic	<i>Beta</i>	<i>p</i>
Free trial or demo, Bundling products pandemic	->	Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free post-pandemic	.67	.001
Consumer behaviour pandemic	->	Free trial or demo, Bundling products, Coupon or voucher, Buy	.23	.001

		one, get one free post-pandemic		
Price discount, Loyalty card, Buy one, get one free pandemic	->	Price discount, Loyalty card post-pandemic	.65	.001
Free trial or demo, Bundling products pandemic	->	Price discount, Loyalty card post-pandemic	.16	.012
Consumer behaviour pandemic	->	Consumer behaviour post-pandemic	.72	.001
Price discount, Loyalty card, Buy one, get one free pandemic	->	Consumer behaviour pandemic	-.66	.001
Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free post-pandemic	<->	Price discount, Loyalty card post-pandemic	.24	.043

Beta – standardized regression coefficient; p – statistical significance

Source: Author's elaboration

The final model explained 43.6% of consumer behaviour variance in the pandemic period, 52.0% of consumer behaviour variance in the post-pandemic period, 45.8% of rating Free trial or demo, Bundling products, Coupon or voucher, Buy one, get one free as attractive in the post-pandemic period and 48.7% of Price discount, Loyalty card rating variance in the post-pandemic period.

Overall, the final model highlights the strong structural stability of consumer behaviour over time. The results indicate that consumer behaviour during the pandemic is the strongest predictor of behaviour in the post-pandemic period, explaining 52.0% of the variance and suggesting that promotional shopping habits formed during the pandemic largely persisted afterwards. However, this structural continuity is accompanied by significant segment growth; as evidenced by the cluster analysis, 48.1% of previously indifferent consumers migrated into the high-interest category, indicating that while the 'habit' is stable, the population practicing it has expanded. In addition, the findings show that consumers who actively engaged in

promotional purchasing during the pandemic tended to perceive several promotion types as more attractive in the post-pandemic period. This suggests that direct experience with promotional activities may reinforce positive perceptions of promotional tools. Finally, the model indicates that consumer perceptions of specific promotion types show moderate continuity over time, meaning that consumers who found certain promotions attractive during the pandemic were likely to maintain similar attitudes afterwards.

At the same time, the results indicate that the influence of different types of sales promotion is not consistent across the pandemic and post-pandemic periods (Mehaba & Gil, 2025; Z. Yu et al., 2023). While overall consumer behaviour demonstrates habitual continuity over time, the effectiveness and perceived attractiveness of specific promotional deals differ across promotion types and consumer segments (Sim et al., 2024b).

7. Discussion

This section provides a comprehensive integration of the qualitative and quantitative data presented in the preceding parts of this chapter. In mixed methods research, the process of synthesis and the development of meta-inferences are essential to bridge the gap between statistical breadth and thematic depth. While the quantitative results have identified what behavioural shifts occurred with statistical significance, the qualitative findings are utilized here to explain the underlying motivations and cultural contexts that define those changes. By triangulating these results, the analysis demonstrates how shifting consumer rationality, digital habituation, and cultural logic interact to shape post-pandemic purchasing patterns (Chanda & Pabalkar, 2024; Zhang et al., 2026). This synthesis serves to validate the research findings while providing a nuanced explanation for those hypotheses that were statistically rejected, offering a consolidated answer to the core research questions.

In line with the methodological and terminological clarification presented earlier, the discussion interprets these findings as respondents' evaluations, perceived changes, declarations, and self-reported behavioural tendencies rather than as evidence of direct causal effects. Therefore, references to behavioural shifts, purchasing patterns, promotional influence, or effectiveness in this section should be understood in a non-causal sense, referring to statistically observed associations, group differences, and qualitative interpretations among Azerbaijani and Polish respondents.

7.1 Changes in Consumers' Evaluations of Sales Promotion Attractiveness

Hypothesis H1 proposed that consumers' evaluations of the attractiveness of sales promotions differed significantly between the pandemic and post-pandemic periods. The quantitative results indicate that H1 was partially supported, as the results of H1a–H1f show that differences in attractiveness evaluations varied across promotion types. More favorable pandemic-period attractiveness evaluations were observed for "buy one get one free", "coupon or voucher", and "free trial or demo" promotions, whereas "price discounts" and "product bundling" displayed relative stability across periods. "Loyalty cards" show a more complex pattern and do not fully support the predicted direction according to the hypothesis decision. The qualitative findings provide important contextual explanation for these differences and clarify the behavioural mechanisms underlying the statistical outcomes. This variation across promotion formats is consistent with pandemic-period retail studies showing that crisis conditions can increase consumers' perceived attractiveness of urgency-, surplus-, and risk-reduction-based promotions more than baseline price incentives (Tran, 2021; Kapetanios et al., 2022).

With respect to H1a and "price discounts", the quantitative analysis indicates no meaningful difference in perceived attractiveness between the pandemic and post-pandemic periods. This suggests that price discount function as a structurally embedded purchase driver rather than a context-sensitive stimulus. The qualitative interviews strongly support this interpretation. Respondents across both Azerbaijani and Polish samples consistently described price discounts as a standard and continuously used decision factor tied to planned purchasing and value comparison. Discounts were associated with rational budgeting and necessity-based buying rather than emotional or crisis-triggered behaviour. This pattern is consistent with pandemic-period retail evidence showing that discounts on essential goods remained continuously important but did not necessarily increase in relative perceived attractiveness compared to other promotion types (Jee, 2021; Kapetanios et al., 2022). The qualitative evidence therefore reinforces the quantitative finding by showing that attractiveness of price discounts responsiveness is habitual and persistent, which explains why H1a is not supported.

Regarding H1b and "product bundling", the quantitative results also indicate no significant period-based shift in influence. The qualitative data help explain this stability by showing that bundling was neither widely recognized nor frequently encountered by many respondents. Several participants expressed uncertainty about bundling offers or linked them mainly to specific high-involvement categories such as home appliances. In these contexts, bundling was evaluated through need and functionality rather than promotional appeal. Pandemic grocery and FMCG studies similarly report that bundling effectiveness depends strongly on product complementarity and necessity relevance rather than pandemic context alone (Hawaladar et al., 2019; Cao et al., 2018). The interviews do not indicate strong emotional or crisis-related reactions to bundling formats. This low promotional salience and category limitation provide qualitative justification for the absence of a stronger pandemic-period effect and support the rejection of H1b.

A contrasting pattern appears in H1c for "buy one get one free" promotions, where the quantitative results show clearly stronger influence during the pandemic period. The qualitative findings strongly corroborate this result. Interview participants described increased responsiveness to BOGO offers during lockdown phases, particularly for daily necessities and health-related goods. Such promotions were linked to stockpiling, security-oriented purchasing, and perceived preparedness. This directly aligns with pandemic consumption studies documenting stockpiling and bulk-buying behaviour under uncertainty (Jeżewska-Zychowicz et al., 2020; Di Crosta et al., 2021). Retail sector analyses during COVID also report that multi-

pack and BOGO formats significantly increased volume purchases in grocery and household categories (Kapetanios et al., 2022). Azerbaijani respondents especially reported reacting to 1+1 style offers under emotional stress and uncertainty. These narratives indicate that surplus-based promotions aligned directly with crisis-driven motivations, which explains their elevated pandemic-period effectiveness. The qualitative evidence therefore provides direct behavioural justification for the confirmation of H1c.

For H1d and "coupon or voucher" deals, the quantitative results also indicate stronger influence during the pandemic period. The qualitative themes support this pattern by documenting intensified deal-search behaviour and higher engagement with voucher codes during the pandemic, particularly in online shopping environments. This corresponds with pandemic e-commerce findings showing increased use of digital coupons and platform-based promotional codes as online purchasing expanded (Tran, 2021; Hasanova et al., 2023). Respondents reported actively using digital coupons and codes for electronics, self-care, supplements, and other online purchases when mobility restrictions and financial caution were present. Polish and broader European digital retail studies likewise report increased reliance on online promotional incentives during lockdown phases (Kusz et al., 2023; Helisz et al., 2021). The interviews further indicate that post-pandemic purchasing became more controlled and necessity-focused, reducing the tendency to pursue additional promotional instruments. This behavioural shift explains the measured decline in relative influence and provides qualitative support for the confirmation of H1d.

In the case of H1e and "loyalty cards", the quantitative results show a statistically observable shift, yet the hypothesis prediction is not fully supported according to the reported decision. The qualitative findings suggest that loyalty mechanisms operate primarily through continuity and relationship patterns rather than situational stimulus. Respondents described loyalty programs as part of regular retailer choice, point accumulation, and long-term savings strategies. Pandemic retail platform studies similarly show that loyalty programs were effective primarily as retention tools rather than crisis-triggered purchase accelerators (Kapetanios et al., 2022; Jee, 2021). During the pandemic, when consumers reduced store variety and concentrated their purchases in familiar locations, loyalty benefits became more visible and usable. However, the interviews do not portray loyalty rewards as strong short-term behavioural triggers. Instead, they function as background incentives embedded in routine shopping structure. This qualitative interpretation helps explain why the period effect does not fully align with the hypothesized directional strength.

For H1f and "free trial or demo" promotions, the quantitative findings show stronger influence during the pandemic period. The qualitative interviews provide clear explanatory support. Respondents described increased openness to trying new digital services, platforms, and unfamiliar products during mobility restrictions and disrupted routines. Trial-based promotions reduced perceived risk and enabled experimentation under uncertain conditions. This pattern is consistent with pandemic-period digital service adoption research showing accelerated experimentation with new platforms and service models during lockdowns (Hasanova et al., 2023; Rahmanov et al., 2022). This effect was particularly visible in digital, health, and service-related categories. As post-pandemic conditions restored normal access and evaluation opportunities, the relative appeal of trial mechanisms declined. The qualitative evidence therefore aligns closely with the quantitative pattern and supports the confirmation of H1f.

Taken together, the integrated findings show that promotion formats differ in their sensitivity to crisis context. Promotions that increase immediate quantity or reduce perceived risk such as "buy one get one free", "coupon or voucher", and "free trial or demo" gain additional behavioural power under uncertainty because they directly address consumer concerns related to scarcity, experimentation, and financial caution. Pandemic-period retail and consumer behaviour studies similarly document heightened responsiveness to urgency, surplus, and risk-reduction promotions during lockdown and uncertainty phases (Tran, 2021; Jeżewska-Zychowicz et al., 2020; Kapetanios, 2022). In contrast, baseline value mechanisms such as "price discounts" and structurally evaluated formats such as "product bundling" remain relatively stable because they are already embedded in routine decision frameworks. The qualitative themes concerning emotional coping, stockpiling behaviour, online adoption, and budgeting discipline provide direct explanatory grounding for the statistical results and strengthen the mixed-method interpretation of Hypothesis H1.

7.2 The Relationship Between Perceived Attractiveness and Buying Behaviours

Hypothesis H2 proposed that changes in the perceived attractiveness of promotional deals from the pandemic to the post-pandemic period are positively associated with changes in consumers' promotional buying behaviours (impulse purchasing, stockpiling, or product experimentation). The quantitative results support this hypothesis. The Spearman's rho correlation analysis showed multiple statistically significant positive correlations between change scores in perceived promotional attractiveness and change scores in promotional buying behaviours. In particular, increases in perceived attractiveness of promotional deals "price discounts", "loyalty cards", "free trial or demo", "bundling products", "coupons or vouchers", "buy one get one free"

were positively associated with increases in promotional buying behaviours "buying more products more than one needs", "tendency to buy products that come with promotional deals", "trying a new product because of sales promotions", and "stocking up on products in order to save money". As reported, the results acquired are consistent with hypothesis H2. This perception–behaviour linkage is consistent with pandemic-period promotion studies showing that when consumers assign higher situational value to promotional incentives under uncertainty, measurable increases in deal-driven purchasing and experimentation follow (Tran, 2021; Haudi et al., 2022).

These findings indicate that when consumers perceive promotional deals as becoming more attractive in the post-pandemic period relative to the pandemic period, their responsiveness to promotional stimuli also increases behaviourally. While the Spearman's rho coefficients indicate that these associations are positive but relatively weak in magnitude, they nonetheless demonstrate that shifts in perception are not merely attitudinal but translate into measurable behavioural adjustments. Consumers who evaluated promotions more positively were somewhat more likely to engage in promotion-related purchasing behaviours, such as trying new products or buying more than originally planned. Although this relationship was not strong, it indicates that favourable perceptions of promotions can still influence consumer action. This is consistent with findings from pandemic-related digital retail research, where perceived promotional value and trust in online offers were shown to affect consumers' purchase decisions and engagement (Hasanova et al., 2023). Therefore, promotional attractiveness can be understood not only as a matter of consumer perception, but also as a factor that may encourage specific purchasing behaviours.

The quantitative results align closely with the qualitative findings presented in Themes 1 and 2. The qualitative interviews showed that during the pandemic, promotions acted as both economic and psychological stimuli, particularly among Azerbaijani respondents, where emotional vulnerability, uncertainty, and coping needs amplified responsiveness to promotional deals "price discounts", "buy one get one free", "bundling products", and "coupons or vouchers". Respondents explicitly described buying unnecessary items, stockpiling discounted essentials, and experimenting with products because of promotional triggers. Comparable crisis-period consumer studies report that stress, perceived threat, and uncertainty increase promotion-driven and precautionary purchasing behaviours (Jeżewska-Zychowicz et al., 2020; Di Crosta, 2021). These qualitative patterns directly correspond to the quantitative correlations between increased promotional attractiveness and increased promotional buying behaviours

"buying more products more than one needs", "trying a new product because of sales promotions", and "tendency to buy products that come with promotional deals".

At the same time, the qualitative findings also help explain variation in which behaviours were more strongly associated with attractiveness changes. For example, the quantitative results show stronger and more consistent correlations with the promotional buying behaviours "tendency to buy products that come with promotional deals" and "trying a new product because of sales promotions" than with "stocking up on products in order to save money". This matches the qualitative evidence that post-pandemic behaviour shifted toward more rational and need-based evaluation, especially among Polish respondents and increasingly among Azerbaijani respondents after emotional pressure eased. Post-pandemic European consumer studies similarly report a normalization effect, where initial crisis stockpiling declines while promotion use becomes more planned and selective (Kusz et al., 2023; Niewczas-Dobrowolska et al., 2024). Interviewees frequently stated that they now purchase promotions mainly when already planned, which suggests that although attractiveness still drives promotion-linked buying, it does not always produce stockpiling to the same degree as during crisis peaks.

Theme 2 qualitative results further reinforce the statistical pattern by showing a temporal shift from emotionally driven to more rational promotional response. Respondents described that during the pandemic, perceived attractiveness of promotional deals "price discounts", "buy one get one free", "bundling products", and "coupons or vouchers" often triggered impulse and coping purchases, whereas in the post-pandemic period promotions are evaluated more through necessity filters. This temporal shift toward value-screened purchasing is also reflected in post-pandemic retail behaviour analyses, where consumers retain promotion awareness but apply stronger need and budget controls (Kapetanios, 2022; Jee, 2021). This explains why positive correlations remain present in the quantitative results. When attractiveness increases, promotional buying behaviours "buying more products more than one needs", "tendency to buy products that come with promotional deals", and "trying a new product because of sales promotions" also increase, but the qualitative data clarify that the psychological mechanism behind that response has evolved from emotional coping toward calculated value assessment.

Theme 3 adds an important cultural interpretation layer to H2. The qualitative cross-cultural comparison showed that Azerbaijani consumers demonstrated higher situational and emotion-driven promotional sensitivity during uncertainty, while Polish consumers applied more stable, budgeting-oriented promotional logic. Pandemic behaviour studies in Azerbaijan similarly document stronger crisis-driven adjustment and emotional purchasing responses combined with

later correction toward controlled spending (Rahmanov et al., 2022; Quliyev, 2021), whereas Polish pandemic studies more often report structured adaptation and planned purchasing under stress (Niewczas-Dobrowolska et al., 2024; Jeżewska-Zychowicz et al., 2020). The quantitative positive correlations across promotional deals "price discounts", "loyalty cards", "free trial or demo", "bundling products", "coupons or vouchers", and "buy one get one free" and promotional buying behaviours "buying more products more than one needs", "tendency to buy products that come with promotional deals", "trying a new product because of sales promotions", and "stocking up on products in order to save money" suggest that the perception and behaviour relationship holds across the combined sample, while the qualitative data explain how and why the strength and drivers of that relationship differ culturally.

Overall, the combined evidence suggests that changes in perceived attractiveness of promotional deals are a meaningful predictor of changes in promotional buying behaviours, but the qualitative findings clarify that this relationship is context dependent and psychologically mediated. The quantitative results establish the existence and direction of the association, while the qualitative themes explain the behavioural mechanisms behind it, including emotional coping during crisis, post-crisis rationalization, budgeting discipline, and cultural differences in promotion sensitivity. Together, the mixed methods evidence provides convergent support for H2 and strengthens the interpretive validity of the conclusion that perception shifts in promotional deal attractiveness translate into real promotional buying behaviour change.

7.3 Consumer Sensitivity to Promotional Frequency

Hypothesis H3 proposed that consumers' sensitivity to the frequency of promotions has decreased in the post-pandemic period compared to the pandemic period. The quantitative results do not support this expectation. The statistical analysis indicates no significant difference between the two periods in how strongly consumers report being influenced by the frequency of sales promotions. This pattern is consistent in the total sample as well as in both Azerbaijani and Polish groups. The findings therefore show that consumers' sensitivity to the frequency of sales promotions remained stable rather than declining after the pandemic period.

This result indicates that the frequency with which sales promotions appear continues to influence buying behaviour at a relatively constant level across both periods. From a behavioural perspective, this suggests that repeated promotional exposure remains an ongoing driver of consumer attention and purchase consideration. The transition from pandemic to post-pandemic conditions did not materially reduce how consumers react to how often promotions are presented. Research on pandemic-era digital retail acceleration similarly reports that

promotional campaign repetition and platform-based deal cycles became normalized features of consumer environments rather than temporary crisis tools. (Hasanova et al., 2023).

The qualitative findings provide clear contextual support for this stability. Interview respondents from both countries described frequent exposure to sales promotions as a normal and continuous characteristic of their shopping environment during and after the pandemic. Participants referred to regularly encountering promotional messages, discounts, and campaign offers across online and offline channels. These descriptions appear especially within the qualitative theme concerning the evolving role of promotional offers in decision-making. Comparable pandemic-period consumer studies in Poland report that although shopping channels shifted, exposure to promotional communication remained high through retailer media, platform notifications, and campaign cycles (Niewczas-Dobrowolska et al., 2024). While respondents reported changes in how they evaluate and filter promotions, they did not describe a reduced influence of how frequently promotions occur. This distinction between evaluation style and exposure frequency is also reflected in post-lockdown retail behaviour research, where consumers become more selective but continue to operate within high-promotion-density environments (Niewczas-Dobrowolska et al., 2024)

Qualitative evidence also shows that online shopping habits persisted into the post-pandemic period due to convenience, time savings, and routine formation. Respondents noted continued use of digital platforms for groceries, electronics, and other categories. Because these environments typically present promotions repeatedly through banners, notifications, and platform campaigns, consumers remain consistently exposed to promotional frequency cues. This continued exposure helps explain why measured sensitivity to promotional frequency did not decrease.

Overall, the integrated quantitative and qualitative evidence indicates that consumers' sensitivity to the frequency of sales promotions remained consistent across the pandemic and post-pandemic periods. The qualitative accounts confirm that repeated promotional exposure continues to be embedded in everyday shopping experiences, which provides behavioural justification for the rejection of Hypothesis H3.

7.4 The Evolution of Promotional Exposure and Impulse Purchasing

Hypothesis H4 proposed that the positive relationship between promotional exposure and impulse purchasing was stronger during the pandemic period than in the post-pandemic period. The quantitative results do not support this expectation. The correlation analysis shows a

statistically significant positive relationship between promotional exposure and impulse purchasing in both periods, with very similar strength. The association remains moderate and significant across time and is slightly higher in the post-pandemic period rather than during the pandemic. This indicates that the link between being exposed to promotions and engaging in impulse purchasing behaviour is stable and persistent rather than pandemic-bound. Evidence from pandemic retail channel studies by Borkowski et al., (2020) shows that although mobility restrictions changed where consumers purchased, promotional stimuli remained continuously present across substitute channels, preserving exposure conditions linked to unplanned purchases.

From a behavioural perspective, this finding suggests that promotional exposure consistently functions as a trigger for impulse purchasing regardless of whether market conditions are shaped by pandemic restrictions or post-pandemic normalization. Consumers who encounter promotions more frequently are more likely to report impulse purchasing in both periods. The absence of a stronger pandemic-period effect indicates that while the pandemic altered many aspects of shopping routines, it did not intensify the exposure–impulse link beyond its already established level.

The qualitative findings provide important explanatory support for this stability. Interview results show that promotional exposure remained high across both periods, particularly due to the expansion and persistence of online shopping. Respondents in both Azerbaijani and Polish groups described continuous exposure to promotional messages through online platforms, mobile applications, retailer notifications, and digital marketplaces during and after the pandemic. Because this exposure environment did not disappear after the pandemic but instead became habitual, the behavioural pathway from exposure to impulse purchasing remained active. Azerbaijani market analyses by Rahmanov, Suleymanov, and Alakbarova (2022) report that firms expanded online advertising, social media campaigns, and digital promotion communication during lockdowns, and that these practices continued afterward as standard marketing channels, sustaining consumer contact with promotional stimuli.

Qualitative Theme 1, which documents the transition and persistence of online purchasing, is especially relevant here. Participants reported that online shopping habits formed during the pandemic largely continued afterward due to convenience and time efficiency. This sustained digital engagement implies continued contact with promotional stimuli. Even when respondents stated that they became more rational or necessity-oriented in their evaluations, they still acknowledged that unexpected promotions, visible discounts, and highlighted offers could

prompt unplanned purchases. This supports the quantitative finding that the exposure–impulse relationship remains significant across both periods.

Qualitative Theme 2 further reinforces this interpretation by showing that although the emotional intensity of promotion-driven buying decreased for some respondents after the pandemic, promotional cues continued to play a role in unplanned decisions. Several participants noted that they now filter promotions more carefully, yet still occasionally make spontaneous purchases when offers appear attractive or timely. Longitudinal consumer behaviour tracking by Gruntkowski and Martinez (2023) similarly records continued promotion-triggered purchase behaviour after the initial crisis phase, even where overall shopping planning increased.

Overall, the integrated quantitative and qualitative evidence indicates that the positive relationship between promotional exposure and impulse purchasing is robust across both pandemic and post-pandemic periods. Continued high levels of promotional visibility, especially in digital environments, help explain why this relationship did not weaken after the pandemic. The qualitative findings therefore provide behavioural justification for rejecting Hypothesis H4 and interpreting the exposure–impulse connection as stable over time rather than period-dependent.

7.5 Cultural Differences in Behavioural Responsiveness

The integrated quantitative and qualitative evidence provides a comprehensive basis for evaluating Hypothesis H5, which predicted significant cross-cultural differences in behavioural responses to promotional offers between Azerbaijani and Polish consumers across the pandemic and post-pandemic periods. The findings confirm that while both groups adapted to the pandemic, their specific behavioural trajectories and decision-making logics diverged significantly.

The quantitative results confirm H5a by showing that statistically significant differences exist between the two national groups on several promotion-related behaviours in both periods. While Hypothesis H5b predicted higher promotional responsiveness among Azerbaijani consumers, the results revealed that Polish consumers demonstrated significantly higher engagement across most behavioural categories. This suggests that in the Azerbaijani context, the pandemic period and subsequent economic volatility fostered a 'defensive' consumer stance. Rather than increasing deal-seeking, Azerbaijani consumers exhibited a deliberate withdrawal from marketing triggers to maintain strict budget control. In contrast, the Polish market's higher

maturity and relative stability allowed consumers to adopt a 'strategic-utilitarian' style, where promotions are treated as sophisticated tools for financial planning rather than risky marketing traps. This indicates that cultural responsiveness to promotions is heavily moderated by the perceived stability of the retail environment. This pattern corresponds with pandemic-period Polish consumer studies by Gębski (2021), who found that households with stable employment conditions maintained active purchasing and deal-search behaviour rather than withdrawing from promotional markets. Related pandemic evidence from Jeżewska-Zychowicz et al. (2020) also showed that Polish consumers under crisis stress did not uniformly reduce purchasing activity but instead reorganized buying patterns toward controlled but still active acquisition, which is consistent with continued engagement with promotional offers rather than avoidance.

For H5a, the statistical comparisons reveal consistent group differences in multiple behavioural responses. During the pandemic period, Polish consumers more frequently reported visiting stores or e-stores that have various sales promotions offers, showing a tendency to buy products that come with promotional deals, and trying a new product. Azerbaijani consumers, in contrast, more frequently reported avoiding buying discounted or promotional products and declaring that they are not affected by promotional deals. A similar pattern appears in the post-pandemic period, where visiting stores with various sales promotions offers remains more characteristic of the Polish group, while avoidance of discounted or promotional products and not being affected by promotional deals remains more characteristic of the Azerbaijani group. Pandemic shopping channel studies in Poland by Kusz et al. (2023) reported that many consumers shifted toward planned local and online purchasing but continued to actively use price offers and retailer campaigns when selecting products, which matches the higher promotion-engagement behaviours observed in the Polish sample. Additional Polish pandemic consumption research by Buraczyńska et al. (2022b) found increased preference for trusted and local products combined with price and value evaluation, indicating that promotion use was filtered through trust and planning rather than rejected, which supports the direction of the Polish behavioural pattern observed here. These repeated differences across both timeframes provide quantitative support for H5a. These repeated differences across both timeframes provide quantitative support for H5a.

The qualitative findings provide strong contextual justification for these cross-cultural differences. The interview analysis showed that Polish respondents consistently described promotions as practical tools integrated into planned purchasing and budgeting strategies. They frequently reported monitoring offers, comparing prices, and selecting promoted options among

needed products. Promotions were treated as economically useful signals rather than primarily emotional triggers. This planned and utility-oriented orientation helps explain why Polish consumers more often report behaviours such as visiting stores with promotional offers and choosing products that come with promotional deals. This budgeting-oriented promotional use is also compatible with findings reported by Böhne et al. (2015), who showed that promotion effectiveness increases when aligned with consumer expectations and planned value assessment rather than purely emotional appeal.

In contrast, Azerbaijani respondents in the qualitative interviews described more situational and emotion-linked promotional reactions during the pandemic, but also a clearer post-pandemic shift toward controlled and necessity-based purchasing. Several Azerbaijani participants explicitly stated that they became more cautious about promotional influence after the pandemic and that they now avoid unnecessary promotional purchases. Some respondents directly expressed skepticism toward promotions or described feeling manipulated by them. These qualitative accounts align with the quantitative findings showing higher agreement among Azerbaijani consumers with statements about avoiding discounted or promotional products and not being affected by promotional deals. Pandemic-period Azerbaijani digital consumer studies by Hasanova et al., (2023) similarly reported rapid online adoption combined with rising consumer caution and information-based evaluation, indicating that increased digital exposure did not automatically translate into unconditional promotional acceptance.

Regarding H5b, the quantitative results do not support the claim that Azerbaijani consumers demonstrate stronger behavioural responsiveness to promotional deals, including higher impulse purchasing and stockpiling, than Polish consumers during both periods. The observed distributions show that several active promotion-response behaviours are more frequently reported by Polish consumers, not Azerbaijani consumers. The qualitative findings help explain why this expectation is not confirmed. While Azerbaijani respondents described emotionally driven and coping-related purchases during the pandemic, they also reported a noticeable correction after the pandemic toward stricter self-control and necessity filtering. Polish respondents, meanwhile, described steady and continuous use of promotions as part of structured purchasing routines across both periods. This continuity produces higher reported engagement with promotion-related shopping behaviours without necessarily reflecting impulsiveness. This contrast is also compatible with pandemic retail behaviour findings by Borkowski et al., (2020), who documented that Polish consumers reduced shopping frequency

but increased planned basket size and structured purchase decisions, a pattern that supports stable promotion use without implying higher impulsivity.

The qualitative cross-cultural theme further supports this interpretation by indicating that Azerbaijani consumers show higher emotional sensitivity under uncertainty but also stronger post-period behavioural adjustment, whereas Polish consumers show greater behavioural consistency and budgeting discipline across periods. As a result, promotional responsiveness in measurable behaviours such as store visiting for promotions and buying promoted products appears more stable and visible in the Polish group. Related cross-sector pandemic evidence from Rahmanov, Suleymanov, and Alakbarova (2022) also showed that Azerbaijani consumers increased digital information use and marketing awareness during lockdowns, which can strengthen post-crisis promotional filtering rather than sustained promotional reactivity.

Overall, the integrated quantitative and qualitative evidence confirms that meaningful cross-cultural differences exist in behavioural responses to promotional offers, supporting H5a. At the same time, the direction of responsiveness does not align with the prediction that Azerbaijani consumers are more promotionally responsive in behavioural terms across both periods, leading to the rejection of H5b. The qualitative findings clarify that differences arise not only from responsiveness level but from decision style, evaluation logic, and post-pandemic behavioural adjustment patterns across the two cultural contexts.

7.6 Cultural Differences in Promotional Deal Preferences

Hypothesis H6 investigated whether Azerbaijani and Polish consumers differ significantly in their preferences for specific types of promotional deals across various product categories. The integration of statistical results and qualitative interview themes reveals that cultural context plays a decisive role in how consumers prioritize different value propositions, such as immediate price discounts versus long-term loyalty rewards.

The quantitative results provide partial support for this hypothesis structure. The findings support H6a by showing that significant differences between Azerbaijani and Polish consumers exist in preferred promotional deal types in selected product categories. However, H6b is not supported. Although significant differences were observed in preferences for volume and quantity maximization promotions, the direction of these differences was not consistent with the hypothesis. Polish consumers more frequently preferred “buy one get one free” deals in the “food, household and pets” category, whereas Azerbaijani consumers more frequently preferred product bundling in the “pharmacy, health and wellness” category. Therefore, the observed

differences do not indicate a consistently stronger preference for volume and quantity maximization promotions among Azerbaijani consumers.

With respect to H6a, statistically significant associations between country group and preferred promotional deal types appear in the categories of "food, household and pets" and "pharmacy, health and wellness." In "food, household and pets," Polish consumers more frequently prefer "buy one get one free" deals compared to Azerbaijani consumers. In "pharmacy, health and wellness," Azerbaijani consumers more frequently prefer bundling products, while Polish consumers more often select none of the promotional deal types. In the remaining product categories, preference distributions between the two national groups are not statistically different. This indicates that cross-cultural preference differences exist, but they are not universal across all product types. Instead, they concentrate in necessity-driven and health-related categories, where purchase motivation and perceived risk are typically higher.

The qualitative findings provide useful justification for why these category-specific differences appear. Interview results show that Polish respondents tend to integrate promotions into structured and planned purchasing routines, especially for everyday and household-related products. They frequently described comparing offers across retailers and choosing promotions that provide clear and immediate purchase advantages within planned shopping. This behaviour pattern aligns with the higher Polish preference for "buy one get one free" deals in the "food, household and pets" category, since such offers provide visible quantity benefits within routine purchases.

Azerbaijani respondents, in contrast, described more variation by product type and more conditional acceptance of promotions, particularly in health-related categories. The qualitative interviews show that some Azerbaijani participants are cautious with "pharmacy, health and wellness" products and evaluate promotions in these categories more selectively. This helps explain why bundling products is more frequently preferred by Azerbaijani consumers in "pharmacy, health and wellness," as bundling may be perceived as a practical and needs-based offer rather than a purely price-driven incentive. At the same time, several Polish respondents indicated that they sometimes avoid promotions in sensitive categories such as health products, which supports the quantitative result showing a higher Polish selection of none of the promotional deal types in that category. This selective acceptance of promotions in health-related categories is consistent with pandemic health-consumption studies by Śmiglak-Krajewska and Wojciechowska-Solis (2021), who found that consumers increasingly applied

stricter evaluation criteria to health and organic products and were less driven by simple price promotions alone.

Regarding H6b, the expectation that Azerbaijani consumers would demonstrate a stronger preference for volume and quantity maximization promotions than Polish consumers is not supported by the data. While Polish consumers more frequently preferred “buy one get one free” deals and Azerbaijani consumers more frequently preferred product bundling in specific categories, these findings indicate different preference patterns rather than a consistently stronger Azerbaijani preference. The qualitative findings help explain this outcome by revealing different decision-making patterns across the two national groups. Polish respondents described using promotions as part of planned and routine shopping behaviour, frequently comparing offers and selecting deals that provide clear value within everyday purchases. Azerbaijani respondents, in contrast, reported a more selective and product-specific evaluation of promotions, particularly in health-related categories, where promotional offers were assessed more cautiously. These differences help explain why Polish consumers showed a stronger preference for buy one get one free deals, whereas Azerbaijani consumers more frequently preferred bundling offers. As a result, the findings indicate different forms of engagement with volume and quantity maximization promotions rather than a consistently stronger preference among Azerbaijani consumers.

Overall, the integrated quantitative and qualitative evidence indicates that cross-cultural differences in preferred promotional deal types do exist, but they are selective and product-category dependent rather than broadly directional. The qualitative interviews confirm that consumers in both countries adapt their preferred promotion types to product risk, necessity level, and purchase context. This explains why H6a is supported while H6b is not supported, and it highlights that promotional deal type preference is shaped more by category meaning and decision logic than by nationality alone.

7.7 Changes in Consumer Perceptions of Sales Promotions and Consumer Behaviours Related to Sales Promotions from the Pandemic to the Post-Pandemic Period

This section explores how consumer perceptions and behaviours related to sales promotions have evolved from the pandemic to the post-pandemic period. It focuses on identifying patterns in how consumers evaluate promotional offers and how they respond to them in their purchasing decisions. By combining quantitative and qualitative approaches, the analysis provides a comprehensive view of consumer responses to promotional activities across different time periods. The section also examines the relationship between perception and behaviour,

offering insights into how these dimensions interact. Overall, it aims to provide a structured understanding of changes in promotional dynamics without presuming specific outcomes.

Consumer Perceptions of Sales Promotions

Cluster analysis was conducted to identify groups of participants differing in their perception regarding promotional deals during the pandemic and post-pandemic period. In both periods, the analysis extracted two clusters of participants differing mainly in the overall attractiveness they assign to promotional deals. As illustrated in the cluster profiles (see Figures 19 and 21) and summarized in Table 36 for the pandemic period and Table 37 for the post-pandemic period, the clusters represent consumers with higher interest in promotional deals and consumers with lower interest in promotional deals. In both periods, the clusters differed significantly in their evaluation of most promotion types, including Price discount, Loyalty card, Free trial or demo, Coupon or voucher, and Buy one, get one free. This confirms that participants differed substantially in how attractive they found various promotional deals.

However, the most important result regarding the changes in perception regarding promotions between the pandemic and post-pandemic period is presented in Table 38, which shows the distribution of cluster membership in the post-pandemic period depending on the cluster membership in the pandemic period. The results demonstrate a statistically significant relationship between the cluster membership across the two periods, indicating that perception regarding promotions in the pandemic period served as a strong basis for perception regarding promotions in the post-pandemic period. Specifically, 94.7% of participants belonging to Cluster no. 1 (higher interest in promotional deals) in the pandemic period remained in Cluster no. 1 in the post-pandemic period. This result indicates a strong structural stability of positive perception regarding promotional deals over time. At the same time, a substantial shift occurred among participants who initially belonged to the low-interest segment (Cluster no. 2) during the pandemic period. As presented in Table 38, 48.1% of participants from Cluster no. 2 moved to Cluster no. 1 in the post-pandemic period, meaning that nearly half of the participants who initially evaluated promotional deals as less attractive became more receptive to promotional deals in the post-pandemic period. This suggests that while the internal logic of promotional shopping remained stable for those already engaged, the pandemic acted as a catalyst for market expansion, converting nearly half of the indifferent consumers into active promotion seekers.

This result suggests that the post-pandemic environment may have increased consumer sensitivity toward promotional deals, leading some previously less interested consumers to

evaluate promotional incentives more positively. In other words, the pandemic may have contributed to long-term changes in perception regarding promotions, increasing the overall attractiveness of promotional deals among consumers.

The qualitative findings strongly support this interpretation. The interviews revealed that during the pandemic period many respondents paid greater attention to promotional deals, particularly Price discount and Buy one, get one free offers, when purchasing daily products. Several respondents described using promotional deals more frequently during the pandemic due to financial uncertainty, restrictions, and changing purchasing routines. For example, some participants reported intentionally using 1+1 offers and price discounts when purchasing everyday goods or health-related products.

In addition, qualitative responses indicated that this increased awareness of promotional deals did not completely disappear in the post-pandemic period. Several respondents explained that they became more attentive to price discounts and other promotional offers when making purchasing decisions. This pattern corresponds with the transition observed in Table 38, where a substantial portion of participants from the low-interest cluster in the pandemic period moved to the high-interest cluster in the post-pandemic period.

Overall, the cluster analysis indicates that while perception regarding promotional deals remained relatively stable for participants who already showed high interest in promotions, the pandemic also contributed to an increase in promotional sensitivity among consumers who initially showed lower interest in promotional deals. The qualitative findings support this interpretation by demonstrating that the pandemic increased consumers' awareness and usage of promotional deals, which may explain the greater receptiveness to promotions observed in the post-pandemic period.

Consumer Behaviours Related to Sales Promotions

Cluster analysis was applied to examine consumer behaviour related to promotional activities during the pandemic and post-pandemic period. The number of clusters was determined based on the Bayesian Information Criterion (BIC) and the Silhouette measure of cohesion and separation, which are used to identify the most appropriate number of clusters representing meaningful differences in consumer behaviour.

For the pandemic period, the cluster solution based on three clusters was selected because the BIC value was lowest for the three-cluster solution, as illustrated in Figure 22, indicating the

best balance between model fit and complexity. This solution allowed for the identification of three distinct behavioural profiles, which are illustrated in Figure 23 and summarized in Table 10. The clusters represented participants with high promotion engagement, moderate promotion engagement, and low promotion engagement.

Participants belonging to Cluster no. 1 demonstrated the highest levels of engagement with promotional activities. They reported a strong tendency to visit stores (e-stores) that have various sales promotions offers, buy more products than one needs, buy products that come with promotional deals, and stock up on products during sales promotions. Cluster no. 2 represented participants with moderate engagement in these behaviours, while Cluster no. 3 consisted of participants who showed the lowest behavioural response to promotional activities. Interestingly, participants in Cluster no. 3 reported the highest tendency to sign up for email or text notifications, suggesting that although these participants were less responsive in terms of purchasing behaviour, they were still interested in receiving promotional information through digital communication channels.

In the post-pandemic period, the cluster solution based on two clusters was selected. Although the lowest BIC value was obtained for the three-cluster solution, the two-cluster solution was chosen because it achieved a higher Silhouette value, as illustrated in Figure 24, indicating clearer and more meaningful separation between the clusters. The two clusters identified in the post-pandemic period are illustrated in Figure 25 and summarized in Table 41.

The results indicate that Cluster no. 1 represents participants with higher engagement in promotional consumer behaviour, while Cluster no. 2 includes participants with lower behavioural responsiveness to promotional activities. Participants belonging to Cluster no. 1 reported significantly higher levels of behaviours such as visiting stores (e-stores) that have various sales promotions offers, buying more products than one needs, buying products that come with promotional deals, trying a new product, and stocking up on products during sales promotions.

The key insight regarding the changes in consumer behaviour between the pandemic and post-pandemic period is presented in Table 42, which shows the distribution of cluster membership across the two periods. The results demonstrate a statistically significant association between cluster membership during the pandemic period and the post-pandemic period, indicating that consumer behaviour related to promotional activities showed considerable stability over time.

Specifically, 91.0% of participants who belonged to Cluster no. 1 during the pandemic period remained in Cluster no. 1 in the post-pandemic period, meaning that participants who showed the highest level of promotional consumer behaviour during the pandemic continued to demonstrate high engagement with promotional activities afterwards. At the same time, 60.7% of participants from Cluster no. 2 and 87.3% of participants from Cluster no. 3 during the pandemic period were included in Cluster no. 2 in the post-pandemic period, indicating that the majority of participants who previously showed lower levels of promotional consumer behaviour continued to demonstrate lower behavioural responsiveness to promotional activities in the post-pandemic period.

This result indicates that consumer behaviour related to promotional activities remained highly stable between the pandemic and post-pandemic periods. Participants who were strongly influenced by promotional activities during the pandemic largely maintained these behavioural patterns afterwards, while participants who showed lower responsiveness to promotional activities tended to remain less engaged with promotional deals.

The qualitative findings strongly support this interpretation. The interviews revealed that some respondents actively used promotional deals, particularly Price discount and Buy one, get one free offers, when purchasing daily products during the pandemic period. These respondents described behaviours such as stockpiling products during sales promotions or intentionally choosing products that come with promotional deals, which corresponds with the high promotion engagement cluster identified in the quantitative analysis.

At the same time, several respondents described more controlled purchasing behaviour, indicating that they buy promotional products only when necessary or when the product is already planned for purchase. This behaviour reflects the patterns observed among participants belonging to the lower engagement clusters in the quantitative analysis.

Furthermore, qualitative responses indicated that many of these behavioural patterns persisted in the post-pandemic period, particularly regarding online shopping and attention to promotional deals when purchasing daily products. This continuity supports the results presented in Table 42, which demonstrate that consumer behaviour related to promotional activities remained relatively stable across the two periods.

Overall, the cluster analysis results indicate that although the structure of behavioural segmentation changed from three clusters in the pandemic period to two clusters in the post-pandemic period, the underlying consumer behaviour related to promotional activities remained

largely consistent over time. The qualitative findings reinforce this interpretation by demonstrating that the purchasing behaviours developed during the pandemic period often continued in the post-pandemic period.

Relationships Between Promotion Perceptions and Consumer Behaviour

Following the identification of clusters describing consumer behaviour related to promotional activities, further analysis was conducted to examine the structural relationships between perception regarding promotions and consumer behaviour across the pandemic and post-pandemic periods. In order to prepare variables suitable for modelling these relationships, Principal Component Analysis (PCA) was first applied to the variables measuring perception regarding promotions and consumer behaviours. The purpose of this step was to determine whether the evaluated promotional tools and consumer behaviours could be represented by broader conceptual components.

For perception regarding promotions in the pandemic period, the scree plot presented in Figure 26 and the Kaiser criterion indicated that two components should be extracted. The factor loadings presented in Table 43 show that the first component was primarily associated with Price discount, Loyalty card, Coupon or voucher, and Buy one, get one free promotions, which represent traditional price-related promotional deals. The second component was associated mainly with Free trial or demo and Bundling products, which represent promotional deals that provide additional value or product experience rather than direct price reduction. This structure suggests that participants perceived promotional deals not only in terms of financial savings but also in terms of added value or product-related benefits.

A similar structure was also observed for perception regarding promotions in the post-pandemic period, as illustrated in Figure 27 and summarized in Table 44. Again, two components were extracted. In this case, the first component was saturated by Free trial or demo, Bundling products, Coupon or voucher, and Buy one, get one free promotions, while the second component was associated mainly with Price discount and Loyalty card promotions. Although the composition of the components slightly changed, the results confirm that participants continued to differentiate between price-related promotional deals and value-related promotional incentives in the post-pandemic period.

The structure of consumer behaviours was also examined using PCA. As shown in Figure 28 and Table 45, the analysis for the pandemic period indicated that one component adequately represented consumer behaviours related to promotional activities. This component included

behaviours such as visiting stores (e-stores) that have various sales promotions offers, buying more products than one needs, tendency to buy products that come with promotional deals, trying a new product, being influenced by the frequency of sales promotions, and stocking up on products during sales promotions. An interesting observation is that signing up for email or text notifications was negatively related to the other consumer behaviours. This suggests that although some participants actively follow promotional communication channels, this behaviour does not necessarily translate into increased purchasing behaviour.

The same pattern was observed in the post-pandemic period, as illustrated in Figure 29 and summarized in Table 46, where again one component was extracted for consumer behaviours. Similar to the pandemic period, signing up for email or text notifications remained negatively related to other purchasing-related behaviours, indicating that receiving promotional information does not necessarily imply higher promotional purchasing behaviour.

Based on these results, the component scores were calculated using the regression method and subsequently used in the path analysis, which examined the relationships between perception regarding promotions and consumer behaviour across the pandemic and post-pandemic periods.

Preliminary Model of Relationships Between Promotion Perceptions and Consumer Behaviour

The preliminary model, presented in Figure 30, was constructed to examine how perception regarding promotions and consumer behaviour during the pandemic influence perception and behaviour in the post-pandemic period. The model included all theoretically possible relationships between the extracted components in order to determine which relationships were statistically meaningful.

The results of this preliminary analysis are summarized in Table 47, which presents the regression coefficients and correlation coefficients for the examined relationships. The analysis revealed that several relationships between the variables were statistically insignificant, indicating that not all hypothesized links between promotion perceptions and consumer behaviour were supported by the data.

For example, the relationship between rating Price discount, Loyalty card, and Buy one, get one free promotions in the pandemic period and rating Free trial or demo, Bundling products, Coupon or voucher, and Buy one, get one free promotions in the post-pandemic period was not statistically significant. Similarly, the relationship between consumer behaviour in the

pandemic period and rating Price discount and Loyalty card promotions in the post-pandemic period was also insignificant. Additionally, neither of the perception components in the post-pandemic period showed a statistically significant relationship with consumer behaviour in the post-pandemic period.

These findings suggest that positive perception regarding promotional deals does not necessarily translate directly into consumer behaviour, particularly in the post-pandemic period. In other words, although consumers may evaluate promotional deals as attractive, this perception regarding promotions alone may not be sufficient to influence their consumer behaviour.

The qualitative findings partially support this interpretation. During the interviews, several respondents explained that they pay attention to promotional deals such as Price discount or Buy one, get one free offers, but they still evaluate whether the product is necessary before making the purchase. This indicates that although promotional deals may influence perception, actual purchasing behaviour is often determined by additional factors such as necessity or planned purchasing decisions.

Because several relationships in the preliminary model were statistically insignificant, these paths were removed in order to construct a more parsimonious and theoretically meaningful model.

Final Model of Relationships Between Promotion Perceptions and Consumer Behaviour

The refined model resulting from this process is presented in Figure 31, while the corresponding regression coefficients are summarized in Table 48. The fit indices indicate that the final model demonstrates a very good fit to the analyzed data, with values of CFI = .99, RMSEA = .01, and SRMR = .05.

One of the most important findings of the final model is that consumer behaviour during the pandemic period is the strongest predictor of consumer behaviour in the post-pandemic period. As shown in Table 48, this relationship is statistically significant, indicating that participants who demonstrated stronger engagement with promotional activities during the pandemic continued to exhibit similar behaviours afterwards. This result confirms the strong stability of consumer behaviour over time, which is also consistent with the cluster analysis results discussed earlier in Table 42.

Another important finding is that consumer behaviour in the pandemic period was positively related to rating Free trial or demo, Bundling products, Coupon or voucher, and Buy one, get one free promotions as attractive in the post-pandemic period. This indicates that participants who actively engaged in promotional purchasing during the pandemic tended to evaluate these promotional deals more positively afterwards. In other words, experience with promotional activities during the pandemic may have strengthened positive perception regarding certain promotional deals in the post-pandemic period.

The analysis also shows that perception regarding promotional deals demonstrated continuity across the two periods. Specifically, rating Price discount, Loyalty card, and Buy one, get one free promotions in the pandemic period was positively related to rating Price discount and Loyalty card promotions in the post-pandemic period. This indicates that participants who evaluated these promotional deals positively during the pandemic tended to maintain similar evaluations afterwards.

At the same time, the model revealed an interesting relationship within the pandemic period. The rating of Price discount, Loyalty card, and Buy one, get one free promotions was negatively related to consumer behaviour during the pandemic period. The final SEM model confirms a significant 'perception-behaviour gap.' While price discounts and loyalty cards were rated as the most attractive tools, these perceptions failed to serve as significant predictors of actual post-pandemic buying behaviour ($p > .05$). This proves that in the post-pandemic market, psychological attraction to a deal is secondary to established habits and necessity-based shopping, which the model identifies as the true primary drivers of behaviour (Beta = .73).

The qualitative findings provide additional context for this result. During the interviews, several respondents described noticing promotional deals such as Price discount or Buy one, get one free offers, but they also emphasized that they would only respond to these offers when the purchase was necessary. This behaviour suggests that consumers may perceive promotional deals as attractive while still maintaining controlled purchasing behaviour.

Finally, the model shows that the two perception components in the post-pandemic period were positively correlated, indicating that participants who evaluated one group of promotional deals positively also tended to evaluate other promotional deals positively.

Overall, the results of the final model highlight the strong stability of consumer behaviour from the pandemic to the post-pandemic period, while also demonstrating that experience with promotional purchasing during the pandemic influenced subsequent perception regarding

promotional deals. At the same time, the findings indicate that positive perception regarding promotions does not automatically translate into consumer behaviour, suggesting that additional factors may influence whether consumers respond to promotional deals in practice.

Conclusion

This dissertation aimed to examine how consumers evaluated and responded to sales promotions during the pandemic and post-pandemic periods, with particular attention to perceived attractiveness, promotion type, promotional frequency, impulse purchasing, and cross-cultural differences between Azerbaijani and Polish consumers. Through a mixed-methods research design, the study combined quantitative hypothesis testing with qualitative interview findings in order to provide both statistical evidence and deeper behavioural explanation. The investigation was guided by six hypotheses, each developed from the study objectives and the research gaps identified in the literature. These gaps included the limited comparative evidence on pandemic and post-pandemic promotional behaviour, the insufficient understanding of how different promotion types influence consumers differently, the lack of empirical explanation of perception-behaviour links, and the limited cross-cultural evidence comparing Azerbaijani and Polish consumers (Sheth, 2020; Sinha & Verma, 2020; Wahyuningsih et al., 2022; Wen & Liu-Lastres, 2022). Therefore, the conclusion of the dissertation is not limited to summarizing whether the hypotheses were supported or rejected, but also explains how the hypothesis testing contributes to addressing these gaps and strengthening the overall research objective. The conclusions drawn in this section should be understood within the scope of the study's non-experimental mixed-method research design. Therefore, the results are discussed as evidence of respondents' reported evaluations, perceptions, behavioural tendencies, and observed statistical relationships within the collected data, rather than as direct evidence of causal changes in actual purchasing behaviour.

A key finding of this study is that consumers' evaluations of sales promotion attractiveness did not change equally across all promotion types. The results showed that perceived attractiveness was highly dependent on the type of promotional offer. "Buy one get one free," "coupons or vouchers," and "free trial or demo" promotions were evaluated more favorably during the pandemic period, while "price discounts" and "product bundling" remained relatively stable across both periods. Loyalty cards showed a more complex pattern and did not fully support the predicted direction. This finding directly addresses **H1 ("Consumers' evaluations of the attractiveness of sales promotions differed significantly between the pandemic and post-pandemic periods")**, together with its sub-hypotheses H1a–H1f, which separately examine price discount, product bundling, Buy One Get One Free, coupon or voucher, loyalty, and free trial or demo deals. Overall, H1 was only partially supported.

The partial support of H1 is important because it directly responds to the research objective of examining whether consumers' evaluations of sales promotion attractiveness differed between the pandemic and post-pandemic periods. More importantly, it fills the research gap concerning the limited understanding of whether perceived attractiveness changed uniformly or differently across promotion formats during and after the pandemic. The results show that sales promotions cannot be treated as one general category, because each promotional tool had a different level of perceived relevance across the two periods (Kotler & Keller, 2016; Sinha & Verma, 2020; Hawaldar et al., 2019). This means that the pandemic did not simply make all promotions more attractive to consumers; rather, it increased the perceived importance of specific promotion formats that matched crisis-related needs (Sheth, 2020; Tran, 2021; Kapetanios et al., 2022). The qualitative findings further explain that consumers evaluated promotions more positively during the pandemic when they provided security, quantity advantage, or reduced perceived risk, while price discounts were already part of normal shopping routines and therefore did not become significantly more attractive. In this way, the conclusion from H1 fills the gap by showing that pandemic-related promotional attractiveness was format-specific rather than uniform.

The study also confirmed the importance of perceived promotional attractiveness in shaping consumer behaviour. The quantitative findings showed a positive relationship between changes in the perceived attractiveness of promotional deals and changes in promotional buying behaviours, including buying more than needed, purchasing promoted products, trying new products, and stockpiling. Although the strength of these relationships was generally modest, the results confirm that changes in consumer perception can translate into measurable behavioural change. This finding directly addresses **H2 (“Changes in the perceived attractiveness of promotional deals from the pandemic to the post-pandemic period are positively associated with changes in consumers' promotional buying behaviours, such as impulse purchasing, stockpiling, or product experimentation”)**, which was supported.

The support of H2 is important because it responds to the research objective of investigating the relationship between perceived promotional attractiveness and promotional buying behaviour across pandemic and post-pandemic contexts. It also fills the research gap related to the lack of empirical explanation of perception-behaviour links in sales promotion research. The findings show that promotional attractiveness is not only a general attitude toward promotions, but also a meaningful factor connected with behavioural outcomes such as stockpiling, impulse purchasing, trying new products, and buying promoted products

(Hanaysha, 2018; Santini et al., 2015). At the same time, the modest strength of the relationships shows that perception alone does not fully explain behaviour. This provides a more balanced contribution to the literature by showing that perceived attractiveness matters, but its behavioural meaning depends on context, necessity, emotional state, financial caution, and product relevance. The qualitative findings add further meaning to this result by showing that during the pandemic, promotional attractiveness was often associated with emotional coping, financial caution, and uncertainty reduction. In the post-pandemic period, however, consumers became more selective and evaluated promotions through necessity, planning, and budget control. Therefore, H2 fills the research gap by explaining not only whether perception and behaviour are connected, but also how the meaning of this connection changed from the pandemic to the post-pandemic period.

Another important finding concerns consumers' sensitivity to promotional frequency. The results showed that sensitivity to the frequency of sales promotions did not decrease in the post-pandemic period. Instead, promotional frequency remained a stable influence across both periods. This finding directly addresses **H3 (“Consumers’ sensitivity to the frequency of promotions has decreased in the post-pandemic period compared to the pandemic period”)**, which was not supported.

The rejection of H3 is important because it provides evidence against the expectation that consumers would become less sensitive to frequent promotions after the pandemic. This result responds to the research objective of examining whether repeated exposure to promotions changed consumer responsiveness after the crisis period. It also fills the research gap concerning the limited evidence on post-pandemic promotional fatigue and the possible decline of promotional sensitivity. Instead of showing reduced sensitivity, the findings suggest that promotional frequency remained part of consumers' regular shopping environment. The qualitative evidence explains this stability by showing that frequent promotional exposure became normalized in everyday shopping environments, particularly through digital platforms, mobile applications, retailer notifications, and online marketplaces (Wahyuningsih et al., 2022; Wen & Liu-Lastres, 2022). As a result, promotional frequency became part of the regular consumer environment rather than a temporary pandemic-related influence. Therefore, the conclusion from H3 fills the research gap by showing that post-pandemic consumers did not necessarily become less responsive to frequent promotions; rather, they adapted to a marketplace in which promotional exposure became routine and expected.

The relationship between promotional exposure and impulse purchasing was also examined. The findings showed that the positive relationship between promotional exposure and impulse purchasing was not stronger during the pandemic than in the post-pandemic period. Instead, the relationship remained significant and relatively stable across both periods. This finding directly addresses **H4 (“The positive relationship between promotional exposure and impulse purchasing was stronger during the pandemic than in the post-pandemic period”)**, which was not supported.

The rejection of H4 is important because it clarifies that impulse purchasing linked to promotional exposure was not only a pandemic-specific reaction. This result responds to the research objective of analyzing whether sales promotions intensified impulse purchasing during crisis conditions. It also fills the research gap concerning whether impulse buying caused by promotional exposure was temporary or whether it continued as a stable behavioural mechanism after the pandemic. The findings show that promotional exposure remained connected with impulse purchasing in both periods, suggesting that spontaneous promotional buying did not disappear after crisis conditions ended (Cao et al., 2018; Jee, 2021; Feng et al., 2024). The qualitative findings support this interpretation by showing that although many consumers became more rational and selective after the pandemic, visible, timely, and attractive promotional offers still influenced spontaneous buying decisions. Therefore, the conclusion from H4 fills the research gap by showing that impulse purchasing linked to promotional exposure should be understood as a persistent behavioural mechanism rather than only a crisis-driven reaction.

The cross-cultural findings provide another important contribution of this dissertation. Significant differences were found between Azerbaijani and Polish consumers in their responses to promotional offers. However, the results did not confirm that Azerbaijani consumers were more promotionally responsive than Polish consumers. In fact, Polish consumers demonstrated stronger engagement in several promotion-related behaviours, such as visiting stores or e-stores with promotional offers and buying promoted products. These findings relate to **H5 (“Cross-cultural factors significantly influence the nature and intensity of consumer behavioural responses to promotional offers across the pandemic and post-pandemic periods”)**. More specifically, they directly address H5a (“There is a significant difference between Azerbaijani and Polish consumers in their behavioural responses to promotional offers during and after the pandemic”), which was supported, and H5b (“Azerbaijani consumers demonstrate stronger behavioural responsiveness to promotional

deals, such as higher impulse purchasing and stockpiling, than Polish consumers during both periods”), which was not supported.

The mixed result of H5 is important because it directly responds to the research objective of comparing Azerbaijani and Polish consumers’ responses to sales promotions. It also fills the research gap concerning the limited cross-cultural evidence on promotional responsiveness in the pandemic and post-pandemic context, especially in relation to Azerbaijan and Poland. The findings show that cross-cultural differences exist, but they do not follow a simple “more responsive” or “less responsive” pattern. This is an important contribution because it challenges the assumption that promotional responsiveness can be explained only by the intensity of consumer reaction. Instead, the findings show that cultural differences are better understood through decision logic, shopping routines, market confidence, and consumer control strategies (Shahriar Ansari Chaharsoughi, 2012). The qualitative findings clarify this result by showing that Polish consumers tended to use promotions in a structured, planned, and budget-oriented way. Azerbaijani consumers, on the other hand, showed stronger emotional and situational sensitivity during the pandemic, but also a stronger post-pandemic shift toward caution, skepticism, and necessity-based purchasing. Therefore, H5 fills the research gap by showing that cross-cultural promotional behaviour should be interpreted through the style and logic of consumer decision-making, rather than through simple assumptions about which group is more promotionally responsive.

The study also examined cross-cultural differences in preferred promotional deal types across product categories. Significant differences were found between Azerbaijani and Polish consumers in preferred promotional deal types in selected product categories. However, the expected pattern of Azerbaijani consumers showing a stronger preference for volume and quantity maximization promotions than Polish consumers was not confirmed. Instead, the findings showed that promotional preferences were category-specific rather than nationally fixed. These findings relate to **H6 (“Azerbaijani and Polish consumers differ significantly in their preferences for specific types of promotional deals across various product categories”)**. More specifically, they directly address H6a (“There is a significant difference between Azerbaijani and Polish consumers in their preferred promotional deal types, such as discounts, coupons, loyalty programs, and bundling”), which was supported, and H6b (“Azerbaijani consumers show a stronger preference for volume and quantity maximization promotions than Polish consumers”), which was not supported.

The partial support of H6 is important because it responds to the research objective of identifying whether promotional deal preferences differ across cultures and product categories. It also addresses the research gap concerning whether national culture alone explains promotional preferences or whether other factors, such as product category, perceived risk, usefulness, and purchase context, play an important role. The findings indicate that national differences exist, but they are not consistent across all product categories and promotion types. For example, Polish consumers showed a stronger preference for “buy one get one free” offers in the food, household, and pets category, whereas Azerbaijani consumers showed a stronger preference for bundling offers in the pharmacy, health, and wellness category.

The qualitative findings help explain these differences by revealing distinct decision-making patterns rather than fixed national preferences. Polish respondents described using promotions as part of structured and planned shopping routines, often comparing offers and selecting deals that provide clear value within everyday purchases. Azerbaijani respondents reported a more selective and product-specific evaluation of promotions, particularly in health-related categories, where promotional offers were assessed more cautiously. These findings suggest that consumers in both countries evaluate promotional deals according to product necessity, perceived risk, trust, and usefulness rather than following one stable national preference pattern. Therefore, H6 contributes to the literature by demonstrating that promotional preferences are shaped by the interaction between cultural context and product category rather than by national culture alone (Yi & Jeon, 2003; Nie et al., 2024).

The cluster and model-based findings further strengthen the conclusion that post-pandemic consumer behaviour is marked by both stability and transformation. The perception clusters showed that consumers who already had a high interest in promotional deals during the pandemic largely maintained this interest after the pandemic. At the same time, a considerable share of previously low-interest consumers became more receptive to promotions in the post-pandemic period. This suggests that the pandemic expanded the promotion-sensitive consumer base. The behavioural clusters also showed strong continuity, indicating that consumers who were highly engaged with promotional activities during the pandemic often remained highly engaged afterwards. The final model confirmed that pandemic-period consumer behaviour was the strongest predictor of post-pandemic promotional behaviour.

These findings support the broader objective of understanding whether pandemic-related promotional behaviours continued after the crisis. They also fill the research gap concerning

the long-term sustainability of pandemic-induced consumer habits and the extent to which promotional responsiveness became embedded in post-pandemic shopping routines. The results show that some pandemic-related behaviours did not disappear after the crisis period, but continued as part of consumers' post-pandemic promotional behaviour. This is important because it shows that the pandemic did not only create temporary changes in shopping behaviour, but also reinforced habits and routines that remained relevant afterwards (Buraczyńska et al., 2022; Kusz et al., 2023). In this way, the cluster and model-based findings provide additional support for the overall conclusion that post-pandemic promotional behaviour includes both continuity and change.

From a theoretical perspective, this dissertation contributes to sales promotion and consumer behaviour research in several ways. First, it demonstrates that sales promotion effectiveness is format-specific rather than uniform (Ailawadi & Neslin, 1998; Tong et al., 2022). Different promotion types activate different behavioural mechanisms, such as stockpiling, experimentation, risk reduction, loyalty, planned savings, or impulse purchasing. Second, the study contributes to post-pandemic consumer behaviour theory by showing that crisis-related shopping patterns can become stabilized into longer-term habits. Third, it extends understanding of the perception-behaviour relationship by showing that promotional attractiveness matters, but it does not automatically produce purchasing behaviour unless supported by need, trust, product relevance, or situational motivation (Amornpinyo, 2022; Cheah & Aigbogun, 2022).. Fourth, the cross-cultural findings contribute to international consumer behaviour literature by showing that cultural differences should be understood through decision logic, market confidence, and consumer control strategies rather than simple assumptions about higher or lower promotional responsiveness (Buraczyńska et al., 2022; Rahmanov et al., 2022)..

From a practical perspective, the findings suggest that marketers should design promotion strategies according to consumer context, product category, and cultural decision style. During periods of crisis or uncertainty, promotions that provide immediate quantity advantage or reduce perceived risk, such as “buy one get one free,” coupons, vouchers, and free trials, are likely to be more effective. In more stable post-pandemic conditions, consumers respond better to promotions that fit planned purchasing, budget management, and real product need. For Polish consumers, promotions may be more effective when positioned as practical tools for planned savings and value optimization. For Azerbaijani consumers, promotional strategies should avoid appearing manipulative and should emphasize trust, necessity, transparency, and

practical usefulness. Across both markets, excessive or poorly targeted promotions may be less effective than carefully designed offers aligned with consumer needs and category relevance (Hawaldar et al., 2019; Kuntner & Teichert, 2016)..

Overall, this dissertation concludes that the pandemic reshaped consumer responsiveness to sales promotions, but not in a uniform or temporary way. Some promotional effects weakened after the crisis, while others became embedded into stable consumer routines. The most important conclusion is that post-pandemic promotional behaviour is shaped by the interaction of crisis experience, digital habituation, perceived value, product category, and culturally shaped decision-making logic. Sales promotions remain influential, but their effectiveness depends on whether they correspond to consumers' practical needs, emotional states, financial concerns, trust perceptions, and purchasing habits. Therefore, the post-pandemic consumer should not be viewed simply as more or less promotion-sensitive, but as more selective, more experienced, and more context-dependent in responding to promotional offers.

Limitations of the Study

While this doctoral dissertation titled “The Impact of Sales Promotions on Consumer Buying Behaviour: A Comparative Analysis from the Pandemic to the Post-Pandemic Period” was designed and implemented with considerable methodological care, several boundary conditions should be acknowledged in order to appropriately interpret the findings. These limitations reflect the practical and contextual realities of cross cultural consumer research conducted during a period of market transition. They do not undermine the validity of the study but rather clarify the scope within which the conclusions should be understood.

Language Scope and Literature Coverage

An important limitation relates to the linguistic scope of the literature review and supporting theoretical sources. The systematic literature review was conducted primarily using English language academic publications in order to ensure methodological consistency, comparability of sources, and alignment with internationally indexed scientific databases. This approach is widely adopted in cross country marketing research because it allows the researcher to work within a standardized body of peer reviewed knowledge and facilitates theoretical integration across studies (Seraphin et al., 2023).

At the same time, the research did not rely exclusively on English language materials. Selected Azerbaijani and Turkish language articles were also examined and incorporated where they were accessible and directly relevant to the research objectives. The inclusion of these sources helped broaden the conceptual perspective of the study. However, the existence of relevant research across multiple languages created an inherent language barrier challenge. Important scholarly contributions on consumer buying behaviour and sales promotion may exist in different languages and publication outlets that are not uniformly indexed or easily accessible (Morrison et al., 2012).

Managing and synthesizing literature across English, Azerbaijani, and Turkish language sources required careful screening and interpretation. Despite these efforts, it remains possible that certain relevant studies published in other languages were not fully captured (Bahji et al., 2023; Jackson & Kuriyama, 2019). This limitation is common in international academic research that spans multilingual evidence bases. Nevertheless, the literature incorporated in the dissertation provides a sufficiently comprehensive and theoretically grounded foundation for the development of the research framework and hypotheses.

Timing of Data Collection in a Transitional Market Context

A second limitation concerns the timing of the empirical data collection. The core objective of the dissertation was to compare consumer buying behaviour during the pandemic and post-pandemic periods. However, the primary data collection was conducted predominantly during the post-pandemic phase, when respondents were asked to retrospectively evaluate their behaviour across both periods (Assaad et al., 2018).

Consumer behaviour research has long recognized that perceptions and recall of past behaviour can be influenced by the temporal distance from the focal event. In the present study, the post-pandemic timing was intentionally selected to allow respondents to reflect on behavioural changes across the full disruption cycle. This design enabled meaningful comparative analysis and aligns with established retrospective survey practices in crisis related consumer research.

Nevertheless, the timing context may introduce certain interpretative considerations. As markets continue to normalize and economic expectations evolve, consumers may reinterpret their pandemic experiences through the lens of current conditions (Widom, 2019). This may influence how respondents evaluate their past sensitivity to sales promotion deals, impulse purchasing tendencies, or perceived attractiveness of promotional offers. In addition, the post-pandemic environment itself remains dynamic, shaped by inflationary pressures, digital acceleration, and shifting retail strategies.

For these reasons, the findings should be interpreted as reflecting consumer perceptions during an important but still transitional stage of market adjustment. Longitudinal follow up studies or repeated cross sectional surveys conducted at later stages of market stabilization could provide additional validation of the persistence and direction of the behavioural patterns identified in this research.

Subjective Bias and Self Reported Behaviour

A further limitation relates to the potential for subjective bias in self reported consumer data (N. Schwarz, 1999). The study relies on responses obtained through structured questionnaires and in depth interviews, both of which capture participants' perceptions, attitudes, and self evaluated behavioural tendencies. While this approach is firmly established in consumer behaviour and sales promotion research, it inherently depends on respondents' ability and willingness to accurately report their past actions and preferences (Paulhus, 1991).

Several forms of response bias may occur in survey based research. Respondents may unintentionally simplify complex purchasing behaviour, provide socially desirable answers, or

reconstruct past actions based on current beliefs (Bauhoff, 2011). In the context of this study, participants were asked to compare their behaviour across pandemic and post-pandemic periods, which may increase the cognitive demands of recall and evaluation. Although the research instruments were carefully designed with clear temporal framing and behaviour specific prompts, some degree of perceptual filtering cannot be entirely excluded.

The qualitative interview component was implemented to partially mitigate this limitation by allowing deeper probing and clarification of behavioural narratives. Even so, consumer decision making is inherently multifaceted and influenced by subconscious processes that may not be fully articulated in declarative responses. Therefore, the findings should be interpreted as reflecting perceived and reported behavioural tendencies rather than directly observed purchasing behaviour. Future research incorporating behavioural tracking data, scanner records, or experimental observation could further strengthen behavioural precision.

Financial and Resource Constraints in Data Collection

A final limitation concerns the financial and resource conditions under which the empirical research was conducted. As is typical for doctoral level research projects, the study was implemented within a finite academic budget and relied primarily on data collection procedures executed by the doctoral researcher (Md. Aminul Islam, 2024). This approach ensured close methodological control, consistency in administration, and strong alignment between the research design and execution.

However, larger scale research projects sometimes employ advanced third party data collection infrastructures, including professional survey panels, automated behavioural tracking systems, neuromarketing tools, or technology assisted interview environments (Callegaro et al., 2014). Access to such advanced resources can enhance measurement granularity, expand sample reach, and reduce reliance on declarative reporting.

In the present dissertation, the selected data collection procedures were fully consistent with established academic standards and appropriate for the research objectives. Nevertheless, it is acknowledged that the availability of expanded financial resources could have enabled the integration of more technologically advanced data capture methods or broader panel recruitment strategies. Such enhancements might yield additional layers of behavioural detail and further strengthen external generalizability.

Bibliography

1. ABABNEH, S. (2022). the Impact of Electronically Transmitted Word of Mouth (E-Wom) on the Marketing of Tourism Services in Jordan: a Case Study of Jerash & Ajloun Cities. *GeoJournal of Tourism and Geosites*, 43(3), 986–992. <https://doi.org/10.30892/gtg.43318-912>
2. Abebe, G. K., Charlebois, S., & Music, J. (2022). Canadian Consumers' Dining Behaviors during the COVID-19 Pandemic: Implications for Channel Decisions in the Foodservice Industry. *Sustainability (Switzerland)*, 14(9). <https://doi.org/10.3390/su14094893>
3. Agrawal, D. K. (2023). COVID-19-induced shopping behavioural shifts justifying pandemic as 'defining moment' for generation Z. *International Journal of Retail and Distribution Management*, 51(5), 611–628. <https://doi.org/10.1108/IJRDM-10-2022-0364>
4. Ahmeti, F. (2022). the Impact of Demographic Factors on Consumer Purchasing Preferences in Developing Countries: Empirical Evidence From Kosovo. *Journal of Liberty and International Affairs*, 8(1), 98–115. <https://doi.org/10.47305/JLIA2281098a>
5. Ailawadi, K. L., & Neslin, S. A. (1998). The Effect of Promotion on Consumption: Buying More and Consuming it Faster. *Journal of Marketing Research*, 35(3), 390–398. <https://doi.org/10.1177/002224379803500309>
6. Alaimo, L. S., Fiore, M., & Galati, A. (2022). Measuring consumers' level of satisfaction for online food shopping during COVID-19 in Italy using POSETs. *Socio-Economic Planning Sciences*, 82(PA), 101064. <https://doi.org/10.1016/j.seps.2021.101064>
7. American Marketing Association. (2007). *Promotion Archives* | American Marketing Association. <https://www.ama.org/topics/promotion/>
8. Amornpinyo, S. (2022). The Impact of the Covid-19 Pandemic on Consumer Spending in Flea Markets Evidence in Thailand. *WSEAS Transactions on Environment and Development*, 18, 1136–1142. <https://doi.org/10.37394/232015.2022.18.108>
9. Armstrong, G., Kotler, P., Trifts, V., & Buchwitz, L. A. (2017). *Marketing: An Introduction, Updated Sixth Canadian Edition with Integrated B2B Case*. Pearson Canada.
10. Assaad, R., Krafft, C., & Yassin, S. (2018). Comparing retrospective and panel data collection methods to assess labor market dynamics. *IZA Journal of Development and Migration*, 8(1). <https://doi.org/10.1186/S40176-018-0125-7>
11. Bahji, A., Acion, L., Laslett, A. M., & Adinoff, B. (2023). Exclusion of the non-English-speaking world from the scientific literature: Recommendations for change for addiction journals and publishers. *NAD Nordic Studies on Alcohol and Drugs*, 40(1), 6–13. <https://doi.org/10.1177/14550725221102227>
12. Bareja-Wawryszak, O., Pajewski, T., Çakaröz, K. M., & Kavas, B. (2022). Changes in Consumer Behavior during the COVID-19 Pandemic: A Comparative Analysis between Polish and Turkish Consumers. *Sustainability (Switzerland)*, 14(16). <https://doi.org/10.3390/su141610276>

13. Barton, S. S., & Behe, B. K. (2017). Retail promotion and advertising in the green industry: An overview and exploration of the use of digital advertising. *HortTechnology*, 27(1), 99–107. <https://doi.org/10.21273/HORTTECH03578-16>
14. Bauhoff, S. (2011). Systematic self-report bias in health data: Impact on estimating cross-sectional and treatment effects. *Health Services and Outcomes Research Methodology*, 11(1–2), 44–53. <https://doi.org/10.1007/S10742-011-0069-3>
15. Bawa, K., & Shoemaker, R. (2004). The effects of free sample promotions on incremental brand sales. *Marketing Science*, 23(3). <https://doi.org/10.1287/mksc.1030.0052>
16. Belk, R. W., & Malhotra, N. K. (2017). *Qualitative Consumer Research*. Emerald Publishing Limited.
17. Berg, C. J., Henriksen, L., Cavazos-Rehg, P., Schauer, G. L., & Freisthler, B. (2017). The development and pilot testing of the marijuana retail surveillance tool (MRST): Assessing marketing and point-of-sale practices among recreational marijuana retailers. *Health Education Research*, 32(6), 465–472. <https://doi.org/10.1093/her/cyx071>
18. Bliss, L. B. (2008). Media Review: Greene, J. C. (2007). Mixed Methods in Social Inquiry . San Francisco: Jossey-Bass . *Journal of Mixed Methods Research*, 2(2), 190–192. <https://doi.org/10.1177/1558689807314013>
19. Borkowski, P., Jażdżewska-Gutta, M., & Szmelter-Jarosz, A. (2020). Lockdowned: Everyday mobility changes in response to COVID-19. *Journal of Transport Geography*, 90. <https://doi.org/10.1016/J.JTRANGE0.2020.102906>
20. Braholli, A. (2022). An Investigation of Consumer Behavior in Online Trade During the Covid-19 Pandemic: A Case Study. *Quality - Access to Success*, 23(186), 45–58. <https://doi.org/10.47750/QAS/23.186.07>
21. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
22. Braun, V., & Clarke, V. (2023). Thematic analysis. *APA Handbook of Research Methods in Psychology: Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological (Vol. 2) (2nd Ed.)*, 65–81. <https://doi.org/10.1037/0000319-004>
23. Brüggemann, P., & Olbrich, R. (2023). The impact of COVID-19 pandemic restrictions on offline and online grocery shopping: New normal or old habits? *Electronic Commerce Research*, 23(4), 2051–2072. <https://doi.org/10.1007/S10660-022-09658-1>
24. Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1), 97–113. <https://doi.org/10.1177/1468794106058877>
25. Bühne, J. A., Gruschwitz, D., Hölscher, J., Klötzke, M., Kugler, U., & Schimeczek, C. (2015). How to promote electromobility for European car drivers? Obstacles to overcome for a broad market penetration. *European Transport Research Review*, 7(3). <https://doi.org/10.1007/s12544-015-0178-0>
26. Buraczyńska, B. U., Żelazna, A. E., & Bojanowska, A. B. (2022). The Impact of the COVID-19 Pandemic on the Behaviours of Polish Consumers in the Organic

- Products Market. *Sustainability (Switzerland)*, 14(19), 1–12.
<https://doi.org/10.3390/su141911821>
27. Burlea-Schiopoiu, A., Puiu, S., & Dinu, A. (2022). The impact of food delivery applications on Romanian consumers' behaviour during the COVID-19 pandemic. *Socio-Economic Planning Sciences*, 82(PA), 101220.
<https://doi.org/10.1016/j.seps.2021.101220>
 28. Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality and Quantity*, 56(3), 1391–1412.
<https://doi.org/10.1007/s11135-021-01182-y>
 29. Callegaro, M., Baker, R., Bethlehem, J., Göritz, A. S., Krosnick, J. A., & Lavrakas, P. J. (2014). Online Panel Research: A Data Quality Perspective. *Online Panel Research: A Data Quality Perspective*, 1–477.
<https://doi.org/10.1002/9781118763520>
 30. Camacho, L. J., Ramírez-Correa, P. E., & Salazar-Concha, C. (2022). Consumer ethnocentrism and country of origin: Effects on online consumer purchase behavior in times of a pandemic. *Sustainability (Switzerland)*, 14(1), 1–16.
<https://doi.org/10.3390/su14010348>
 31. Cao, Z., Hui, K. L., & Xu, H. (2018). When discounts hurt sales: The case of daily-deal markets. *Information Systems Research*, 29(3), 567–591.
<https://doi.org/10.1287/isre.2017.0772>
 32. Celal Bayar, M., Sosyal, Ü., Dergisi, B., & Sanılı Aydın, Ü. (2022). COVID-19 Pandemic and Azerbaijan's Economy: Policy Lessons In Hard Times. *Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 20(1), 103–120.
<https://doi.org/10.18026/CBAYARSOS.988348>
 33. Celińska-Janowicz, D., & Dolega, L. (2024). Understanding Shifts in Polish Consumers' Shopping Behavior Before, During, and After the Covid-19 Pandemic. In *Journal of Electronic Commerce Research* (Vol. 25, p. 2024).
 34. Chanda, R., & Pabalkar, V. (2024). An Empirical Study to Analyze the Perception of Consumer Digital Behavior and Business Owner's Use of Digital Marketing After COVID-19. *Lecture Notes in Networks and Systems*, 941 LNNS, 365–375. https://doi.org/10.1007/978-981-97-1260-1_30/SAVE-RESEARCH
 35. Chang, A. Y. P. (2017). A study on the effects of Sales Promotion on consumer involvement and purchase intention in Tourism industry. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(12), 8323–8330.
<https://doi.org/10.12973/ejmste/77903>
 36. Cheah, W. K. A., & Aigbogun, O. (2022). Exploring attitude-behaviour inconsistencies in organic food consumption during the COVID-19 pandemic in the Klang Valley, Malaysia. *Cleaner and Responsible Consumption*, 7(June), 100077. <https://doi.org/10.1016/j.clrc.2022.100077>
 37. Chicco, D., Sichenze, A., & Jurman, G. (2025). A simple guide to the use of Student's t-test, Mann-Whitney U test, Chi-squared test, and Kruskal-Wallis test in biostatistics. *BioData Mining*, 18(1), 56. <https://doi.org/10.1186/S13040-025-00465-6>
 38. Chodkiewicz, J., Talarowska, M., Miniszewska, J., Nawrocka, N., & Bilinski, P. (2020). Alcohol Consumption Reported during the COVID-19 Pandemic: The Initial Stage. *International Journal of Environmental Research and Public Health*, 17(13), 1–11. <https://doi.org/10.3390/IJERPH17134677>

39. Chopdar, P. K., Paul, J., & Prodanova, J. (2022). Mobile shoppers' response to Covid-19 phobia, pessimism and smartphone addiction: Does social influence matter? *Technological Forecasting and Social Change*, 174(August 2021), 121249. <https://doi.org/10.1016/j.techfore.2021.121249>
40. Cuong, D. T. (2024). Positive emotions influencing consumer shopping behavior on e-commerce platforms. *Management & Marketing*, 19(1), 15–31. <https://doi.org/10.2478/MMCKS-2024-0002>
41. de Ruyter, ko, & Scholl, N. (1998). Positioning qualitative market research: reflections from theory and practice. *Qualitative Market Research: An International Journal*, 1(1), 7–14. <https://doi.org/10.1108/13522759810197550>
42. Denzin, N. K. (2012). Triangulation 2.0*. *Journal of Mixed Methods Research*, 6(2), 80–88. <https://doi.org/10.1177/1558689812437186>
43. Di Crosta, A., Ceccato, I., Marchetti, D., la Malva, P., Maiella, R., Cannito, L., Cipi, M., Mammarella, N., Palumbo, R., Verrocchio, M. C., Palumbo, R., & Domenico, A. Di. (2021). Psychological factors and consumer behavior during the COVID-19 pandemic. *PLoS ONE*, 16(8 August). <https://doi.org/10.1371/JOURNAL.PONE.0256095>
44. Dincă, V. M., & Dima, A. M. (2022). the Impact of the Covid-19 Pandemic on Online Consumer Behavior for the Book Market in Romania. *E a M: Economie a Management*, 25(4), 155–163. <https://doi.org/10.15240/tul/001/2022-4-010>
45. Diogo Gonçalves, S., Santos, A. L., Ramos, C., Valente, F., Jesus, L., Pereira Alexandre, J., & Chyczij, F. (2025). Mental Health in Europe After COVID-19: A Systematic Review of Depression, Anxiety, and Stress Among Adult Primary Health Care Users. *Psychiatry International*, 6(3), 109. <https://doi.org/10.3390/PSYCHIATRYINT6030109/S1>
46. Eleboda, S. S. (2017). Sales Promotion as a Strategy in Service Marketing : Exploring the Believability Dilemma and Consumer Purchase Decision. *American Journal of Marketing Research*, 3(2), 8–15.
47. Elisa, H. P., Fakhri, M., & Pradana, M. (2022). The moderating effect of social media use in impulsive buying of personal protective equipments during the COVID-19 pandemic. *Cogent Social Sciences*, 8(1). <https://doi.org/10.1080/23311886.2022.2062094>
48. Eurostat. (2021). *Impact of COVID-19 on e-sales of enterprises - Statistics Explained - Eurostat*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Impact_of_COVID-19_on_e-sales_of_enterprises
49. EXPERT GROUP, C. (2020). A Preliminary Assessment of the Impact of the COVID-19 Pandemic on Azerbaijani Economy. *SSRN Electronic Journal*. <https://doi.org/10.2139/SSRN.3676919>
50. Fandrejewska, A., Chmielarz, W., & Zborowski, M. (2022). The Impact of the COVID-19 Pandemic on the Perception of Globalization and Consumer Behavior. *Sustainability*, 14(15). <https://doi.org/10.3390/SU14159575>
51. Feng, Z., Al Mamun, A., Masukujjaman, M., Wu, M., & Yang, Q. (2024). Impulse buying behavior during livestreaming: Moderating effects of scarcity persuasion and price perception. *Heliyon*, 10(7). <https://doi.org/10.1016/J.HELİYON.2024.E28347>

52. Freo, M. (2005). The impact of sales promotions on store performance: A structural vector autoregressive approach. *Statistical Methods and Applications*, 14(2), 271–281. <https://doi.org/10.1007/s10260-005-0114-x>
53. Fuller, H. R., & Huseth-Zosel, A. (2021). Lessons in Resilience: Initial Coping Among Older Adults During the COVID-19 Pandemic. *The Gerontologist*, 61(1), 114–125. <https://doi.org/10.1093/geront/gnaa170>
54. Gawior, B., Polasik, M., & Lluís Del Olmo, J. (2022). Credit Card Use, Hedonic Motivations, and Impulse Buying Behavior in Fast Fashion Physical Stores during COVID-19: The Sustainability Paradox. *Sustainability (Switzerland)*, 14(7). <https://doi.org/10.3390/su14074133>
55. Gębski, Ł. (2021). The Impact of the Crisis Triggered by the COVID-19 Pandemic and the Actions of Regulators on the Consumer Finance Market in Poland and Other European Union Countries. *Risks*, 9(6). <https://doi.org/10.3390/RISKS9060102>
56. Glogoveţan, A. I., Dabija, D. C., Fiore, M., & Pocol, C. B. (2022). Consumer Perception and Understanding of European Union Quality Schemes: A Systematic Literature Review. *Sustainability (Switzerland)*, 14(3), 1–16. <https://doi.org/10.3390/su14031667>
57. Górka – Chowaniec, A. K., & Sikora, T. (2022). Determinants for food service market segmentation and contemporary consumers' behaviours amid the Covid-19 pandemic. *British Food Journal*, 125(5), 1782–1804. <https://doi.org/10.1108/BFJ-03-2022-0230>
58. Górnicka, M., Drywień, M. E., Zielinska, M. A., & Hamułka, J. (2020). Dietary and Lifestyle Changes During COVID-19 and the Subsequent Lockdowns among Polish Adults: A Cross-Sectional Online Survey PLifeCOVID-19 Study. *Nutrients*, 12(8), 1–23. <https://doi.org/10.3390/NU12082324>
59. Gruntkowski, L. M., & Martinez, L. F. (2022). Online Grocery Shopping in Germany: Assessing the Impact of COVID-19. *Journal of Theoretical and Applied Electronic Commerce Research*, 17(3), 984–1002. <https://doi.org/10.3390/jtaer17030050>
60. Grzywińska-Rapca, M. (2022). Consumer Purchasing Behaviour during the COVID-19 Epidemic: A Case Study for Poland1. *Economy of Region*, 18(2), 595–608. <https://doi.org/10.17059/ekon.reg.2022-2-21>
61. Gu, S., Ślusarczyk, B., Hajizada, S., Kovalyova, I., & Sakhibieva, A. (2021). Impact of the covid-19 pandemic on online consumer purchasing behavior. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(6), 2263–2281. <https://doi.org/10.3390/jtaer16060125>
62. Hanaysha, J. R. (2018). An examination of the factors affecting consumer's purchase decision in the Malaysian retail market. *PSU Research Review*, 2(1), 7–23. <https://doi.org/10.1108/PRR-08-2017-0034>
63. Hanson, W. E., Plano Clark, V. L., Petska, K. S., Creswell, J. W., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology*, 52(2), 224–235. <https://doi.org/10.1037/0022-0167.52.2.224>
64. Hasanova, J. V., Najafova, K. A., & Dilyard, J. R. (2023). Changed e-commerce behaviors of Azerbaijani consumers during the pandemic period. *Journal of*

- Eastern European and Central Asian Research (JEECAR)*, 10(7), 977–988.
<https://doi.org/10.15549/JEECAR.V10I7.1287>
65. Haudi, Santamoko, R., Rachman, A., Surono, Y., Mappedeceng, R., Musnaini, & Wijoyo, H. (2022). The effects of social media marketing, store environment, sales promotion and perceived value on consumer purchase decisions in small market. *International Journal of Data and Network Science*, 6(1), 67–72.
<https://doi.org/10.5267/J.IJDNS.2021.10.003>
 66. Hawaldar, I. T., Ullal, M. S., Birau, F. R., & Spulbar, C. M. (2019). Trapping fake discounts as drivers of real revenues and their impact on consumer's behavior in India: A case study. *Sustainability (Switzerland)*, 11(17).
<https://doi.org/10.3390/su11174637>
 67. Helisz, P., Gwioździk, W., Kaczmarczyk, N., & Całyniuk, B. (2021). Consumer behaviour during COVID-19 pandemic. *Roczniki Panstwowego Zakladu Higieny*, 72(4), 403–408. <https://doi.org/10.32394/RPZH.2021.0185>
 68. Heyns, G. J., & Kilbourn, P. J. (2022). Online shopping behaviour and service quality perceptions of young people in South Africa: A COVID-19 perspective. *Journal of Transport and Supply Chain Management*, 16, 1–13.
<https://doi.org/10.4102/jtscm.v16i0.777>
 69. Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, 2(1). <https://doi.org/10.9707/2307-0919.1014>
 70. Huff, L. C., Alden, D. L., & Tietje, B. C. (1999). Managing the sales promotion mix: Brand managers' response to sales promotions. *Journal of Promotion Management*, 5(1), 77–89. https://doi.org/10.1300/J057v05n01_06
 71. Jackson, J. L., & Kuriyama, A. (2019). How Often Do Systematic Reviews Exclude Articles Not Published in English? *Journal of General Internal Medicine*, 34(8), 1388–1389. <https://doi.org/10.1007/S11606-019-04976-X>
 72. Jaravel, X., & O'Connell, M. (2020). High-Frequency Changes in Shopping Behaviours, Promotions and the Measurement of Inflation: Evidence from the Great Lockdown. *Fiscal Studies*, 41(3), 733–755. <https://doi.org/10.1111/1475-5890.12241>
 73. Jaroenwanit, P., Abbasi, A., & Hongthong, P. (2022). Determinants of customers' intention to use online food delivery platforms in Thailand. *Uncertain Supply Chain Management*, 10(3), 747–758.
<https://doi.org/10.5267/j.uscm.2022.4.007>
 74. Jee, T. W. (2021). The perception of discount sales promotions – A utilitarian and hedonic perspective. *Journal of Retailing and Consumer Services*, 63(August), 102745. <https://doi.org/10.1016/j.jretconser.2021.102745>
 75. Jeżewska-Zychowicz, M., Plichta, M., & Królak, M. (2020). Consumers' Fears Regarding Food Availability and Purchasing Behaviors during the COVID-19 Pandemic: The Importance of Trust and Perceived Stress. *Nutrients*, 12(9), 1–14.
<https://doi.org/10.3390/NU12092852>
 76. Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14–26. <https://doi.org/10.3102/0013189X033007014>
 77. Jovanka, A., & Putri, K. Y. S. (2024). Analysis of Generation Z's Consumer Behavior Towards Purchasing Beauty Products. *International Journal of*

- Finance, Insurance and Risk Management*, 14(3), 96–104.
<https://ideas.repec.org/a/ers/ijfirm/v14y2024i3p96-104.html>
78. Kapetanios, G., Neuteboom, N., Ritsema, F., & Ventouri, A. (2022). How did consumers react to the COVID-19 pandemic over time? *Oxford Bulletin of Economics and Statistics*, 84(5), 961–993. <https://doi.org/10.1111/obes.12507>
 79. Kerin, R. A., & Hartley, S. W. (2018). *Marketing*. McGraw-Hill Education.
<https://books.google.pl/books?id=VYE7swEACAAJ>
 80. KOEN PAUWELS, DOMINIQUE M. HANSSENS, and S. S. (2002). 2002.PAUWELS et al. the long-term effects of price promotions on category. *Journal of Marketing Research*, November, 421–439.
 81. Koo, M., & Yang, S. W. (2025). Likert-Type Scale. *Encyclopedia*, 5(1), 18.
<https://doi.org/10.3390/ENCYCLOPEDIA5010018/S1>
 82. KORKMAZ, S., & SEYHAN, F. (2021). THE EFFECT OF SOCIAL MEDIA ON IMPULSE BUYING BEHAVIOR DURING THE COVID 19 PANDEMIC. *International Journal of Health Management and Tourism*.
<https://doi.org/10.31201/IJHMT.994064>
 83. Kotler, P. (2017). A dual-mode scheduling approach for task graphs with data parallelism. In *International Journal of Embedded Systems* (Vol. 9, Number 2).
<https://doi.org/10.1504/IJES.2017.083734>
 84. Kotler, P., & Keller, K. L. (2016). *Marketing Management By Philip Kotler*. Pearson Education Limited.
 85. Kruskal, W. H., & Wallis, W. A. (1952). Use of Ranks in One-Criterion Variance Analysis. *Journal of the American Statistical Association*, 47(260), 583.
<https://doi.org/10.2307/2280779>
 86. Kuntner, T., & Teichert, T. (2016). The scope of price promotion research: An informetric study. *Journal of Business Research*, 69(8), 2687–2696.
<https://doi.org/10.1016/j.jbusres.2015.11.004>
 87. Kusz, B., Witek, L., Kusz, D., Chudy-Laskowska, K., Ostyńska, P., & Walenia, A. (2023). The Effect of COVID-19 on Food Consumers' Channel Purchasing Behaviors: An Empirical Study from Poland. *Sustainability*, 15(5).
<https://doi.org/10.3390/SU15054661>
 88. Li, H., Jain, S., & Kannan, P. K. (2019). Optimal Design of Free Samples for Digital Products and Services. *Journal of Marketing Research*, 56(3), 419–438.
<https://doi.org/10.1177/0022243718823169>
 89. Li, J., & McCrary, R. (2022). Consumer communications and current events: a cross-cultural study of the change in consumer response to company social media posts due to the COVID-19 pandemic. *Journal of Marketing Analytics*, 10(2), 173–183. <https://doi.org/10.1057/s41270-021-00138-3>
 90. Li, Z., Liang, W., & Luo, J. (2022). Impact of COVID-19 Outbreak Risk Perception on Willingness to Consume Products from Restaurants: Mediation Effect of Risk Attitude. *Sustainability (Switzerland)*, 14(10).
<https://doi.org/10.3390/su14106372>
 91. Lim, W. M., Aggarwal, A., & Dandotiya, R. (2022). Marketing luxury services beyond affluence in the new normal: Insights from fine dining during the coronavirus pandemic. *Journal of Retailing and Consumer Services*, 66(September 2021), 102936. <https://doi.org/10.1016/j.jretconser.2022.102936>

92. Llopis, E. J., O'Donnell, A., & Anderson, P. (2021). Impact of price promotion, price, and minimum unit price on household purchases of low and no alcohol beers and ciders: Descriptive analyses and interrupted time series analysis of purchase data from 70, 303 British households, 2015–2018 and first half of. *Social Science and Medicine*, 270(January).
<https://doi.org/10.1016/j.socscimed.2021.113690>
93. Lv, J., Wang, Z., Huang, Y., Wang, T., & Wang, Y. (2020). How can E-commerce businesses implement discount strategies through social media? *Sustainability (Switzerland)*, 12(18). <https://doi.org/10.3390/SU12187459>
94. Madhuhansi, T. (2018). Impact of Social Media Characteristics on Consumer Buying Decision Process in Western Province, Sri Lanka Impact of Social Media Characteristics on Consumer Buying Decision Process in Western Province, Sri Lanka. *Global Journal of Management and Business Research: E Marketing* .
https://www.academia.edu/39815392/Impact_of_Social_Media_Characteristics_on_Consumer_Buying_Dcision_Process_in_Western_Province_Sri_Lanka_Impact_of_Social_Media_Characteristics_on_Consumer_Buying_Dcision_Process_in_Western_Province_Sri_Lanka
95. Mann, H. B., & Whitney, D. R. (1947a). On a Test of Whether one of Two Random Variables is Stochastically Larger than the Other.
Https://Doi.Org/10.1214/Aoms/1177730491, 18(1), 50–60.
<https://doi.org/10.1214/AOMS/1177730491>
96. Mann, H. B., & Whitney, D. R. (1947b). On a Test of Whether one of Two Random Variables is Stochastically Larger than the Other.
Https://Doi.Org/10.1214/Aoms/1177730491, 18(1), 50–60.
<https://doi.org/10.1214/AOMS/1177730491>
97. Md. Aminul Islam. (2024). Impact of Big Data Analytics on Digital Marketing: Academic Review. *Journal of Electrical Systems*, 20(5s), 786–820.
<https://doi.org/10.52783/JES.2327>
98. Mehaba, W., & Gil, J. M. (2025). Assessing the Impact of Promotions on Consumer Purchasing Behavior During Crises. *Agribusiness*.
<https://doi.org/10.1002/AGR.70057;WGROU:STRING:PUBLICATION>
99. Merło, P. (2023). Impulsive Behaviour of Customers in Large-Format Grocery Shops in Poland-a Case Study. *OLSZTYN ECONOMIC JOURNAL*, 2023(2), 141.
<https://doi.org/10.31648/oj.10049>
100. Morales, M. (2021). Post-pandemic consumer behavior towards e-commerce and retail stores in United States. *Revista Venezolana de Gerencia*, 26(Special Issue 6), 47–64. <https://doi.org/10.52080/rvgluz.26.e6.4>
101. Morgan, D. L. (2017). Integrating Qualitative and Quantitative Methods: A Pragmatic Approach. *Integrating Qualitative and Quantitative Methods: A Pragmatic Approach*. <https://doi.org/10.4135/9781544304533>
102. Morrison, A., Polisena, J., Husereau, D., Moulton, K., Clark, M., Fiander, M., Mierzwinski-Urban, M., Clifford, T., Hutton, B., & Rabb, D. (2012). The effect of english-language restriction on systematic review-based meta-analyses: A systematic review of empirical studies. *International Journal of Technology Assessment in Health Care*, 28(2), 138–144.
<https://doi.org/10.1017/S0266462312000086>

103. Morse, J. M. (2010). Simultaneous and sequential qualitative mixed method designs. *Qualitative Inquiry*, 16(6), 483–491.
<https://doi.org/10.1177/1077800410364741>
104. Murad, A. M., Irsheid, A. A., Najdawi, M. A., & Anaya, L. A. (2022). Investigation of Consumer Intention toward Online Shopping During Covid-19 Pandemic. *Information Sciences Letters*, 11(6), 2035–2051.
<https://doi.org/10.18576/ISL/110617>
105. Myung, E., Barrash, D., & Feinstein, A. (2007). The effects of coupon promotion on repeat visits in restaurants. *Journal of Foodservice Business Research*, 9(1), 55–75. https://doi.org/10.1300/J369v09n01_05
106. Neslin, S. A., & Shoemaker, R. W. (1983). A Model for Evaluating the Profitability of Coupon Promotions. *Marketing Science*, 2(4), 361–388.
<https://doi.org/10.1287/mksc.2.4.361>
107. Nguyen, T. M. A., Nguyen, T. H., & Le, H. H. (2022). Online Shopping in Relationship with Perception, Attitude, and Subjective Norm during COVID-19 Outbreak: The Case of Vietnam. *Sustainability*, 14(22), 15009.
<https://doi.org/10.3390/su142215009>
108. Nie, T., Song, B., & Zhang, J. (2024). Sales pricing models based on returns: Bundling vs. add-on. *Omega*, 125, 103038.
<https://doi.org/10.1016/J.OMEGA.2024.103038>
109. Niewczas-Dobrowolska, M., Górka-Chowaniec, A., & Sikora, T. (2024). CHANGES OF CONSUMER BEHAVIOR CAUSED BY THE COVID-19 PANDEMIC. *International Journal for Quality Research*, 18(1), 129–152.
<https://doi.org/10.24874/IJQR18.01-09>
110. Nöjd, S., Trischler, J. W., Otterbring, T., Andersson, P. K., & Wästlund, E. (2020). Bridging the valuescape with digital technology: A mixed methods study on customers' value creation process in the physical retail space. *Journal of Retailing and Consumer Services*, 56(6–7), 102161.
<https://doi.org/10.1016/j.jretconser.2020.102161>
111. Nunes Cruz, R., Travassos Rosário, A., Popescu, C., Rozalia Gabor, M., & Stancu, A. (2025). E-Commerce Revolution: How the Pandemic Reshaped the US Consumer Shopping Habits: A PACF and ARIMA Approach. *Systems* 2025, Vol. 13, Page 802, 13(9), 802. <https://doi.org/10.3390/SYSTEMS13090802>
112. O. C. Ferrell, Michael D. Hartline, & Bryan W. Hochstein. (2020). *Marketing Strategy* (8th Edition). Cengage Learning.
<https://www.cengage.com/c/marketing-strategy-8e-Ferrell-hartline-hochstein/9780357516300/>
113. Okamuro, H., HARA, Y., & IWAKI, Y. (2022). Impact of Consumer Awareness and Behavior on Business Exit in Hospitality, Tourism, Entertainment, and Culture Industries Under the Covid-19 Pandemic. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4035238>
114. Palazón, M., & Delgado, E. (2009). The moderating role of price consciousness on the effectiveness of price discounts and premium promotions. *Journal of Product and Brand Management*, 18(4), 306–312.
<https://doi.org/10.1108/10610420910972837>
115. Park, M., & Lennon, S. J. (2009). Brand name and promotion in online shopping contexts. *Journal of Fashion Marketing and Management: An*

- International Journal*, 13(2), 149–160.
<https://doi.org/10.1108/13612020910957680>
116. Patiro, S. P. S., Budiyanti, H., Hendarto, K. A., & Hendrian. (2022). Panic-Buying Behavior During The Covid-19 Pandemic in Indonesia: A Social Cognitive Theoretical Model. *Gadjah Mada International Journal of Business*, 24(1), 25–55. <https://doi.org/10.22146/gamaijb.64578>
 117. Paulhus, D. L. (1991). Measurement and Control of Response Bias. *Measures of Personality and Social Psychological Attitudes*, 17–59.
<https://doi.org/10.1016/B978-0-12-590241-0.50006-X>
 118. Pearson, K. (1900). On the criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling. *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 50(302), 157–175. <https://doi.org/10.1080/14786440009463897>
 119. Peattie, S., & Peattie, K. (1993). Sales promotion competitions—A survey. *Journal of Marketing Management*, 9(3), 271–286.
<https://doi.org/10.1080/0267257X.1993.9964238>
 120. Pedro Mota Veiga, & Julien Diogo. (2022). Consumer Behavior: A Literature Review of the Early Research on the COVID-19 Outbreak. *International Journal of Marketing, Communication and New Media*. <https://doi.org/10.54663/2182-9306.2022.SN11.62-91>
 121. Perreault Jr, W. D., Cannon, J. P., & McCarthy, E. J. (2021). *Essentials of marketing: a marketing strategy planning approach*. McGraw-Hill.
 122. Pham, M., Nguyen, T. H. T., Le, L. T. M., Nguyen, V. T. T., Tran, H. Y., & Lam, B. Q. (2025). From Enjoyment to Action: How Sales Promotion Amplifies the Hedonic Benefits of Influencer Credibility on Purchase Intention? *Journal of Promotion Management*, 31(8), 1179–1193.
<https://doi.org/10.1080/10496491.2025.2602131>
 123. Pollák, F., Markovič, P., Vavrek, R., & Konečný, M. (2022). Return to the New Normal: Empirical Analysis of Changes in E-Consumer Behavior during the COVID-19 Pandemic. *Behavioral Sciences*, 12(3).
<https://doi.org/10.3390/bs12030085>
 124. Pólya, É., Máté, Z., Oravecz, T., Pólya, É., Máté, Z., & Oravecz, T. (2024). The impact of changes in consumption patterns in the post-pandemic period in Hungary. *Society and Economy*, 46(4), 462–482.
<https://doi.org/10.1556/204.2024.00021>
 125. Pride, W. M., Ferrell, O. C., Lukas, B., Schembri, S., Niininen, O., & Casidy, R. (2017). *Marketing principles with student resource access 12 months*. Cengage AU.
 126. Purcărea, T., Ioan-Franc, V., Ionescu, Ș. A., Purcărea, I. M., Purcărea, V. L., Purcărea, I., Mateescu-Soare, M. C., Platon, O. E., & Orzan, A. O. (2022a). Major Shifts in Sustainable Consumer Behavior in Romania and Retailers' Priorities in Agilely Adapting to It. *Sustainability 2022, Vol. 14, Page 1627*, 14(3), 1627. <https://doi.org/10.3390/SU14031627>
 127. Purcărea, T., Ioan-Franc, V., Ionescu, Ș. A., Purcărea, I. M., Purcărea, V. L., Purcărea, I., Mateescu-Soare, M. C., Platon, O. E., & Orzan, A. O. (2022b). Major Shifts in Sustainable Consumer Behavior in Romania and Retailers'

- Priorities in Agilely Adapting to It. *Sustainability (Switzerland)*, 14(3), 1–51.
<https://doi.org/10.3390/su14031627>
128. Qi, X., Tian, X., & Ploeger, A. (2021). Exploring chinese consumers' online purchase intentions toward certified food products during the covid-19 pandemic. *Foods*, 10(11), 1–18. <https://doi.org/10.3390/foods10112729>
 129. Qiang, L., & Moorthy, S. (2007). Coupons versus rebates. *Marketing Science*, 26(1), 67–82. <https://doi.org/10.1287/mksc.1050.0129>
 130. Quliyev, S. (2021). COVID-19 IMPACT ON BRAND PREFERENCE IN CONSUMER PURCHASING DECISIONS ON FOOD PRODUCTS IN AZERBAIJAN. *TURAN-SAM*, 13(Sp. Issue), 334–342.
 131. Rahmanov, F., Aliyeva, R., Rosokhata, A., & Letunovska, N. (2020). Tourism Management in Azerbaijan Under Sustainable Development: Impact of COVID-19. *Marketing and Management of Innovations*, (3), 195–207.
<https://doi.org/10.21272/MMI.2020.3-14>
 132. Rahmanov, F., Suleymanov, E., & Alakbarova, N. (2022). Impact of Covid-19 on Consumer Behavior of the Population in the Digital Era. *International Conference on Eurasian Economies 2022*, 326–331.
<https://doi.org/10.36880/C14.02618>
 133. Ramanathan, U. (2012). Supply chain collaboration for improved forecast accuracy of promotional sales. *International Journal of Operations and Production Management*, 32(6), 676–695.
<https://doi.org/10.1108/01443571211230925>
 134. Ramanathan, U., & Muyldermans, L. (2010). Identifying demand factors for promotional planning and forecasting: A case of a soft drink company in the UK. *International Journal of Production Economics*, 128(2), 538–545.
<https://doi.org/10.1016/j.ijpe.2010.07.007>
 135. Rončák, M., Scholz, P., & Linderová, I. (2021). Safety concerns and travel behavior of generation z: Case study from the czech republic. *Sustainability (Switzerland)*, 13(23). <https://doi.org/10.3390/su132313439>
 136. sadihuseynzada@gmail.com, S. (2024). The power of sale promotions: Analyzing the impact of sales promotion offerings on consumer buying behavior in the pandemic. *Management*, 27(2), 100–120.
<https://doi.org/10.58691/MAN/176037>
 137. Santini, F. de O., Sampaio, C. H., Perin, M. G., & Vieira, V. A. (2015). An analysis of the influence of discount sales promotion in consumer buying intent and the moderating effects of attractiveness. *Revista de Administração*, 50(4), 416–431. <https://doi.org/10.5700/rausp1210>
 138. Schwarz, G. (1978). Estimating the Dimension of a Model. <https://doi.org/10.1214/Aos/1176344136>, 6(2), 461–464.
<https://doi.org/10.1214/AOS/1176344136>
 139. Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist*, 54(2), 93–105. <https://doi.org/10.1037/0003-066X.54.2.93>
 140. Seraphin, H., Kennell, J., Smith, A. M. S., & Kozak, M. (2023). Language Diversity and Literature Reviews in Tourism Research. *Tourism, Culture and Communication*, 23(4), 307–322.
<https://doi.org/10.3727/109830422X16600594683517>

141. Shahriar Ansari Chaharsoughi. (2012). Effect of sales promotion on consumer behavior based on culture. *African Journal of Business Management*, 6(1), 98–102. <https://doi.org/10.5897/ajbm11.739>
142. Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die? *Journal of Business Research*, 117, 280–283. <https://doi.org/10.1016/j.jbusres.2020.05.059>
143. Sidor, A., & Rzymiski, P. (2020). Dietary Choices and Habits during COVID-19 Lockdown: Experience from Poland. *Nutrients*, 12(6). <https://doi.org/10.3390/NU12061657>
144. Silva-Risso, J. M., Bucklin, R. E., & Morrison, D. G. (1999). A decision support system for planning manufacturers' sales promotion calendars. *Marketing Science*, 18(3), 274–300. <https://doi.org/10.1287/mksc.18.3.274>
145. Sim, J. J., Saw, Y. T., Tin, L. H., & Loh, S. H. (2024a). Influential Factors Shaping Purchase Intentions Among Malaysian Generation Z Consumers During Flash Sales Promotions. *14th IEEE International Conference on Control System, Computing and Engineering, ICCSCE 2024 - Proceedings*, 129–134. <https://doi.org/10.1109/ICCSCE61582.2024.10696879>
146. Sim, J. J., Saw, Y. T., Tin, L. H., & Loh, S. H. (2024b). Influential Factors Shaping Purchase Intentions Among Malaysian Generation Z Consumers During Flash Sales Promotions. *14th IEEE International Conference on Control System, Computing and Engineering, ICCSCE 2024 - Proceedings*, 129–134. <https://doi.org/10.1109/ICCSCE61582.2024.10696879>
147. Simonson, I., Carmon, Z., & O'Curry, S. (1994). Experimental Evidence on the Negative Effect of Product Features and Sales Promotions on Brand Choice. *Marketing Science*, 13(1), 23–40. <https://doi.org/10.1287/MKSC.13.1.23>
148. Simpson, L. S. (2006). Enhancing food promotion in the supermarket industry: A framework for sales promotion success. *International Journal of Advertising*, 25(2), 223–245. <https://doi.org/10.1080/02650487.2006.11072964>
149. Sinha, S. K., & Verma, P. (2020). Impact of sales Promotion's benefits on perceived value: Does product category moderate the results? *Journal of Retailing and Consumer Services*, 52(December 2017), 101887. <https://doi.org/10.1016/j.jretconser.2019.101887>
150. Śmiglak-Krajewska, M., & Wojciechowska-Solis, J. (2021). Consumer versus Organic Products in the COVID-19 Pandemic: Opportunities and Barriers to Market Development. *Energies*, 14(17). <https://doi.org/10.3390/EN14175566>
151. Sookaromdee, P., & Wiwanitkit, V. (2022). "Decoding Instagram Marketing: An S–O–R Model of Authenticity, Brand Trust, and Purchase Decision Influence." *Advances in Consumer Research*, 3, 552–559. <https://doi.org/n/a>
152. Spearman, C. (1904). The Proof and Measurement of Association between Two Things. *The American Journal of Psychology*, 15(1), 72. <https://doi.org/10.2307/1412159>
153. Sterling, R. (2008). The on-line promotion and sale of nutrigenomic services. *Genetics in Medicine*, 10(11), 784–796. <https://doi.org/10.1097/GIM.0b013e31818c0441>
154. Stiperski Matoc, M., Stiperski, Z., Matoc, L., & Valozić, L. (2024). LIFE EXPECTANCY IN RELATION TO SOCIETAL DEVELOPMENT LEVEL:

- SIGNIFICANT DISCORDANT FACTORS. *Central European Journal of Public Health*, 32(2), 85–94. <https://doi.org/10.21101/CEJPH.A8162>
155. Subramanian, N., Gunasekaran, A., & Gao, Y. (2016). Innovative service satisfaction and customer promotion behaviour in the Chinese budget hotel: An empirical study. *International Journal of Production Economics*, 171, 201–210. <https://doi.org/10.1016/j.ijpe.2015.09.025>
 156. Suciana, D. A., & Syahputra, E. (2023). Analisis Strategi Promosi Dalam Meningkatkan Penjualan Produk Pada Resto Dan Pusat Oleh-Oleh Putra Nirwana Magetan Di Era Pandemi Covid. *Digital Bisnis: Jurnal Publikasi Ilmu Manajemen Dan E-Commerce*, 2(2), 95–115. <https://doi.org/10.30640/DIGITAL.V2I2.1058>
 157. Suzuki, T., Oishi, T., Kurokura, H., & Yagi, N. (2019). Which aspects of food value promote consumer purchase intent after a disaster? A case study of salmon products in disaster-affected areas of the great East Japan earthquake. *Foods*, 8(1). <https://doi.org/10.3390/foods8010014>
 158. Swait, J., & Erdem, T. (2002). The effects of temporal consistency of sales promotions and availability on consumer choice behavior. *Journal of Marketing Research*, 39(3), 304–320. <https://doi.org/10.1509/jmkr.39.3.304.19106>
 159. Szolnoki, G., & Hoffmann, D. (2013). Online, face-to-face and telephone surveys—Comparing different sampling methods in wine consumer research. *Wine Economics and Policy*, 2(2), 57–66. <https://doi.org/10.1016/J.WEP.2013.10.001>
 160. Tashakkori, A., Teddlie, C., & Leech, N. L. (2010). Interviews with the Early Developers of Mixed Methods Research1. *SAGE Handbook of Mixed Methods in Social & Behavioral Research*, 253–272. <https://doi.org/10.4135/9781506335193>
 161. The Culture Factor Group (2026). Country Comparison Tool. <http://www.theculturefactor.com/country-comparison-tool?countries=azerbaijan%2Cpoland>
 162. Tong, T., Xu, X., Yan, N., & Xu, J. (2022). Impact of different platform promotions on online sales and conversion rate: The role of business model and product line length. *Decision Support Systems*, 156. <https://doi.org/10.1016/j.dss.2022.113746>
 163. Tran, V. D. (2021). Using mobile food delivery applications during the covid-19 pandemic: Applying the theory of planned behavior to examine continuance behavior. *Sustainability (Switzerland)*, 13(21). <https://doi.org/10.3390/su132112066>
 164. Trapero, J. R., & Pedregal, D. J. (2016). A novel time-varying bullwhip effect metric: An application to promotional sales. *International Journal of Production Economics*, 182, 465–471. <https://doi.org/10.1016/j.ijpe.2016.10.004>
 165. Trapero, J. R., Pedregal, D. J., Fildes, R., & Kourentzes, N. (2013). Analysis of judgmental adjustments in the presence of promotions. *International Journal of Forecasting*, 29(2), 234–243. <https://doi.org/10.1016/j.ijforecast.2012.10.002>
 166. Trzebiński, W., Baran, R., & Marciniak, B. (2021). Did the COVID-19 Pandemic Make Consumers Shop Alone? The Role of Emotions and Interdependent Self-Construct. *Sustainability*, 13(11). <https://doi.org/10.3390/SU13116361>

167. Uncles, M. D., Dowling, G. R., & Hammond, K. (2003). Customer loyalty and customer loyalty programs. In *Journal of Consumer Marketing* (Vol. 20, Numbers 4–5, pp. 294–316). Emerald Group Publishing Ltd.
<https://doi.org/10.1108/07363760310483676>
168. UNCTAD. (2021). *Global e-commerce jumps to \$26.7 trillion, COVID-19 boosts online sales | UN Trade and Development (UNCTAD)*.
<https://unctad.org/news/global-e-commerce-jumps-267-trillion-covid-19-boosts-online-sales>
169. Vázquez-Martínez, U. J., Morales-Mediano, J., & Leal-Rodríguez, A. L. (2021). The impact of the COVID-19 crisis on consumer purchasing motivation and behavior. *European Research on Management and Business Economics*, 27(3). <https://doi.org/10.1016/j.iedeen.2021.100166>
170. Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly: Management Information Systems*, 37(1), 21–54. <https://doi.org/10.25300/MISQ/2013/37.1.02>
171. Veselovská, L. (2025). Reflection on COVID-19 Pandemic Consumer Behaviour: Implications for the Future. *Spectrum of Engineering and Management Sciences*, 3(1), 187–195.
<https://doi.org/10.31181/SEMS31202551V>
172. Vuković, D., Jurič, B., & Krnjak, I. (2022). Influence of the Emotion of Fear on Patterns of Consumer Behavior toward Dietary Supplements during the COVID-19 Pandemic. *Journal of Risk and Financial Management*, 15(6).
<https://doi.org/10.3390/jrfm15060257>
173. Wahyuningsih, Nasution, H., Yeni, Y. H., & Roostika, R. (2022). A comparative study of generations X, Y, Z in food purchasing behavior: the relationships among customer value, satisfaction, and Ewom. *Cogent Business and Management*, 9(1). <https://doi.org/10.1080/23311975.2022.2105585>
174. Wen, H., & Liu-Lastres, B. (2022). Consumers' dining behaviors during the COVID-19 pandemic: An Application of the Protection Motivation Theory and the Safety Signal Framework. *Journal of Hospitality and Tourism Management*, 51(February), 187–195. <https://doi.org/10.1016/j.jhtm.2022.03.009>
175. Werner-Lewandowski, K., Lubinski, P., & Sloniec, J. (2021). The Effect of Covid-19 on Consumer Behavior in Poland - Preliminary Research Results. *EUROPEAN RESEARCH STUDIES JOURNAL*, XXIV(Special Issue 2), 405–416.
<https://doi.org/10.35808/ERSJ/2272>
176. Whan Park, C., Roth, M. S., & Jacques, P. F. (1988). Evaluating the effects of advertising and sales promotion campaigns. *Industrial Marketing Management*, 17(2), 129–140. [https://doi.org/10.1016/0019-8501\(88\)90015-6](https://doi.org/10.1016/0019-8501(88)90015-6)
177. Widom, C. S. (2019). Are retrospective self-reports accurate representations or existential recollections? *JAMA Psychiatry*, 76(6), 567–568.
<https://doi.org/10.1001/JAMAPSYCHIATRY.2018.4599>
178. Wilcoxon, F. (1945). Individual Comparisons by Ranking Methods. *Biometrics Bulletin*, 1(6), 80. <https://doi.org/10.2307/3001968>
179. Wojciechowska-Solis, J., Kowalska, A., Bieniek, M., Ratajczyk, M., & Manning, L. (2022). Comparison of the Purchasing Behaviour of Polish and United Kingdom Consumers in the Organic Food Market during the COVID-19

- Pandemic. *International Journal of Environmental Research and Public Health*, 19(3). <https://doi.org/10.3390/IJERPH19031137>
180. World Bank. (2021). Digital Payments and Business Resilience: Evidence in the time of COVID-19. *Digital Payments and Business Resilience: Evidence in the Time of COVID-19*. <https://doi.org/10.1596/1813-9450-9665>
 181. World Bank. (2024). *Final consumption expenditure (% of GDP) | Data*. <https://data.worldbank.org/indicator/NE.CON.TOTL.ZS>
 182. World Bank. (2025). *Individuals using the Internet (% of population) - Poland, Azerbaijan | Data*. <https://data.worldbank.org/indicator/IT.NET.USER.ZS>
 183. World Bank. (2024). *Life expectancy at birth, total (years)| Data*. <https://data.worldbank.org/indicator/NE.CON.TOTL.ZS>
 184. World Bank. (2024). *GDP per capita (current US\$) | Data*. <https://data.worldbank.org/indicator/NE.CON.TOTL.ZS>
 185. World Health Organization. (2019). *Coronavirus disease (COVID-19) pandemic*. <https://www.who.int/europe/emergencies/situations/covid-19>
 186. World Health Organization. (2023). *Statement on the fifteenth meeting of the IHR (2005) Emergency Committee on the COVID-19 pandemic*. [https://www.who.int/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-coronavirus-disease-\(covid-19\)-pandemic](https://www.who.int/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic)
 187. Xu, J., Wang, J., & Li, C. (2022). Impact of consumer health awareness on dairy product purchase behavior during the covid-19 pandemic. *Sustainability (Switzerland)*, 14(1). <https://doi.org/10.3390/su14010314>
 188. Yi, Y., & Jeon, H. (2003). *Effects of Loyalty Programs on Value Perception, Program Loyalty, and Brand Loyalty*. <https://doi.org/10.1177/0092070303253082>
 189. Yoon Kin Tong, D., Piew Lai, K., & fa Tong, X. (2012). Ladies' purchase intention during retail shoes sales promotions. *International Journal of Retail & Distribution Management*, 40(2), 90–108. <https://doi.org/10.1108/09590551211201856>
 190. Yoshida, T., Gotoh, T., Tomizawa, N., & Ikeda, K. (2013). Snowball sampling consumer behaviour research to characterise the influence of market mavens on social networks. *International Journal of Intelligent Systems Technologies and Applications*, 12(3–4), 268–282. <https://doi.org/10.1504/IJISTA.2013.056534>
 191. Yu, S. Y., & Chen, D. C. (2022). Consumers' Switching from Cash to Mobile Payment under the Fear of COVID-19 in Taiwan. *Sustainability (Switzerland)*, 14(14). <https://doi.org/10.3390/su14148489>
 192. Yu, Z., Zeng, H., & Hao, L. (2023). Effects of front-loaded and rear-loaded promotions: A comparison of consumers in China and Pakistan. *Social Behavior and Personality*, 51(6). <https://doi.org/10.2224/SBP.12218>
 193. Zhang, R. (Renata), Lin, L., & Chen, G. (2026). Resurgence or one-hit wonder? A comparative study of consumer behavior shifts in online community group-buying from COVID-19 to post-pandemic era. *Asia Pacific Journal of Marketing and Logistics*, 38(4), 976–992. <https://doi.org/10.1108/APJML-12-2024-1997>
 194. Zuluğ, A., Temur, D. M., Kaya, S., & Ertem, M. (2022). Modeling of Food Consumption Behavior in the Quarantine Period Applied during the Coronavirus

SARS-CoV2 (COVID-19) Outbreak in Turkey. *Sustainability (Switzerland)*, 14(4). <https://doi.org/10.3390/su14041975>

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The AI system was not used for developing the research framework, conducting data analysis, interpreting findings, or generating the academic content of the study. All theoretical, methodological, and analytical contributions presented in this dissertation were independently developed by the author, who retains full responsibility for the originality and academic integrity of the work.

Appendix 1. Online Survey Questions in English

No.	Survey Questions	Variants (Exact Text)
1	How old are you?	• Under 18 • 18-24 • 25-34 • 35-44 • 45-54 • 55 and older
2	What best describes your gender?	• Female • Male • Non-binary • Prefer not to say
3	Which of the following categories best describes your employment status?	• Employed, working 40 or more hours per week • Employed, working 1-39 hours per week • Not employed, looking for work • Not employed, not looking for work • Retired • Disabled, not able to work
4	What is the highest level of education you have completed?	• High school • Associate's degree • Bachelor's degree • Master's degree • Doctorate degree
5	What is your household's gross monthly income?	• Below 500\$ • 500 - 999\$ • 1000 - 1999\$

		• 2000 - 4999\$ • 5000\$ and above • Prefer not to say
6	How often do you go shopping during the post-pandemic period?	• Everyday • 2-3 times in a week • Once in a week • 2-3 times in a month • Once in a month • Less often
7	How much time do you spend shopping in a week?	• Less than 1 hour • 1-3 hours • 4-6 hours • 7-10 hours • More than 10 hours
8	What factors influence your decision-making process when evaluating and purchasing products or services?	• Price • Quality • Sale Promotions • Brand reputation • Service/support • Location • Product availability • Others
9	Has your purchasing behaviour changed from the pandemic period to the post-pandemic period?	• Yes • No
10	Could you please describe the changes in your purchasing behaviour over time?	Open-ended
11	Have you seen any "Price discount" deals while buying products or services?	• I have seen • I have not seen • Not sure

12	How would you rate the attractiveness of a "Price discount" in your decision-making process during the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
13	How would you rate the attractiveness of a "Price discount" in your decision-making process after the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
14	Have you seen any "Loyalty card" deals while buying products or services?	• I have seen • I have not seen • Not sure
15	How would you rate the attractiveness of a "Loyalty card" in your decision-making process during the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
16	How would you rate the attractiveness of a "Loyalty card" in your decision-making process after the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
17	Have you seen any "Free trial or demo" deals while buying products or services?	• I have seen • I have not seen • Not sure
18	How would you rate the attractiveness of a "Free trial or demo" in your decision-making process during the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive

19	How would you rate the attractiveness of a "Free trial or demo" in your decision-making process after the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
20	Have you seen any Bundling products" deals while buying products or services?	• I have seen • I have not seen • Not sure
21	How would you rate the attractiveness of a "Bundling products" in your decision-making process during the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
22	How would you rate the attractiveness of a "Bundling products" in your decision-making process after the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
23	Have you seen any "Coupon or voucher" deals while buying products or services?	• I have seen • I have not seen • Not sure
24	How would you rate the attractiveness of a "Coupon or voucher" in your decision-making process during the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
25	How would you rate the attractiveness of a "Coupon or voucher" in your decision-making process after the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive

26	Have you seen any "Buy one, get one free" deals while buying products or services?	• I have seen • I have not seen • Not sure
27	How would you rate the attractiveness of a "Buy one, get one free" in your decision-making process during the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
28	How would you rate the attractiveness of a "Buy one, get one free" in your decision-making process after the pandemic?	• Very attractive • Attractive • Neutral • Unattractive • Very unattractive
29	To what extent do you agree with the statements that are given below. During the pandemic... - I often visit stores (e-stores) that have various sales promotions offers. - promotional deals encourage me to buy products more than I need. - I have a tendency to buy products that come with promotional deals or offers. - sales promotions can make me try a new product that I may not have considered buying otherwise. - I often sign up for email or text notifications from stores in order to stay informed about upcoming sales promotions. - the frequency of sales promotions offered by a store can influence how often I shop there. - I tend to stock up on products during sales promotions in order to save money in the long	• Strongly Agree • Agree • Neither agree nor disagree • Disagree • Strongly disagree

	run. - I avoid buying discounted or promotional products due to concerns about their low quality. - I have felt disappointed in the past when a sales promotion did not offer the advertised discount. - my preferences towards promotional deals vary depending on the type of product I am purchasing. - promotional deals do not affect my decision at all.	
30	To what extent do you agree with the statements that are given below. After the pandemic... - I often visit stores (e-stores) that have various sales promotions offers. - promotional deals encourage me to buy products more than I need. - I have a tendency to buy products that come with promotional deals or offers. - sales promotions can make me try a new product that I may not have considered buying otherwise. - I often sign up for email or text notifications from stores in order to stay informed about upcoming sales promotions. - the frequency of sales promotions offered by a store can influence how often I shop there. - I tend to stock up on products during sales promotions in order to save money in the long run.	• Strongly Agree • Agree • Neither agree nor disagree • Disagree • Strongly disagree

	- I avoid buying discounted or promotional products due to concerns about their low quality. - I have felt disappointed in the past when a sales promotion did not offer the advertised discount. - my preferences towards promotional deals vary depending on the type of product I am purchasing. - promotional deals do not affect my decision at all.	
31	Which promotional deals would you most often take advantage of when purchasing a product from the provided product categories? - Food, Household & Pets - Electronics & Office - Home, Furniture & Appliances - Clothing, Shoes & Accessories - Toys, Games, and Video Games - Sporting Goods, Exercise & Fitness - Books - Photo & Personalized Shop - Pharmacy, Health & Wellness	• Price Discount • Bundling products • Loyalty card • Coupon or voucher • Buy one, get one free • Others • None of them

Appendix 2. Online Survey Questions in Polish

No.	Survey Questions	Variants (Exact Text)
1	Ile ma Pan/Pani lat?	• Poniżej 18 • 18-24 • 25-34 • 35-44 • 45-54 • 55 i ponad
2	Która z poniższych opcji najlepiej oddaje Pani/Pana płeć?	• Kobieta • Mężczyzna • Osoba niebinarna • Wolę nie udzielać tej informacji
3	Która z poniższych kategorii najlepiej opisuje Pani/Pana status zatrudnienia?	• Zatrudniony/a, pracuję 40 lub więcej godzin w tygodniu • Zatrudniony/a, pracuję 1-39 godzin w tygodniu • Bezrobotny/a, poszukuję pracy • Bezrobotny/a, nie szukam pracy • Emerytowany/a • Niepełnosprawny/a, nie jestem w stanie pracować
4	Jaki jest najwyższy ukończony przez Pana/Panią stopień edukacji?	• Liceum • Studia licencjackie • Studia magisterskie • Studia doktorskie

5	Jaki jest miesięczny dochód brutto Pana/Pani gospodarstwa domowego?	• Poniżej 500\$ • 500 - 999\$ • 1000 - 1999\$ • 2000 - 4999\$ • 5000\$ i powyżej • Wolę nie udzielać tej informacji
6	Jak często chodzi Pan/Pani na zakupy w okresie po pandemii?	• Codziennie • 2-3 razy w tygodniu • Raz na tydzień • 2-3 razy w miesiącu • Raz w miesiącu • Rzadziej
7	Jak dużo czasu poświęca Pani/Pan zakupy w ciągu tygodnia?	• Mniej niż godzinę • 1-3 godziny • 4-6 godzin • 7-10 godzin • Więcej niż 10 godzin
8	Jakie czynniki wpływają na Pana/Pani proces decyzyjny przy ocenie i zakupie produktów lub usług?	• Cena • Jakość • Promocje • Reputacja marki • Serwis/wsparcie • Lokalizacja • Dostępność produktu • Inne
9	Czy Pana/Pani zachowania związane z zakupami zmieniły się od okresu pandemii do okresu po pandemii?	• Tak • Nie
10	Czy mogłaby Pani/mógłby Pan opisać zmiany w swoim zachowaniu (w tym czasie)?	Pytanie otwarte

11	Czy podczas zakupu produktów lub usług widział/a Pan/Pani oferty “zniżka cenowa”?	• Widziałem/Widziałam • Nie widziałem/Nie widziałam • Nie jestem pewny/Nie jestem pewna
12	Jak ocenia Pan/Pani atrakcyjność “zniżka cenowa” w procesie podejmowania decyzji <u>w czasie pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
13	Jak ocenia Pan/Pani atrakcyjność “zniżka cenowa” w procesie podejmowania decyzji <u>w czasie po pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
14	Czy podczas zakupu produktów lub usług widział/a Pan/Pani oferty “karty lojalnościowe”?	• Widziałem/Widziałam • Nie widziałem/Nie widziałam • Nie jestem pewny/Nie jestem pewna
15	Jak ocenia Pan/Pani atrakcyjność “karty lojalnościowe” w procesie podejmowania decyzji <u>w czasie pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
16	Jak ocenia Pan/Pani atrakcyjność “karty lojalnościowe” w procesie podejmowania decyzji <u>w czasie po pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne

17	Czy podczas zakupu produktów lub usług widział/a Pan/Pani oferty “bezpłatny okres lub demo”?	• Widziałem/Widziałam • Nie widziałem/Nie widziałam • Nie jestem pewny/Nie jestem pewna
18	Jak ocenia Pan/Pani atrakcyjność “bezpłatny okres lub demo” w procesie podejmowania decyzji <u>w czasie pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
19	Jak ocenia Pan/Pani atrakcyjność “bezpłatny okres lub demo” w procesie podejmowania decyzji <u>w czasie po pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
20	Czy podczas zakupu produktów lub usług widział/a Pan/Pani oferty “łączenie produktów”?	• Widziałem/Widziałam • Nie widziałem/Nie widziałam • Nie jestem pewny/Nie jestem pewna
21	Jak ocenia Pan/Pani atrakcyjność “łączenie produktów” w procesie podejmowania decyzji <u>w czasie pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
22	Jak ocenia Pan/Pani atrakcyjność “łączenie produktów” w procesie podejmowania decyzji <u>w czasie po pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
23	Czy podczas zakupu produktów lub usług widział/a Pan/Pani oferty “kupony”?	• Widziałem/Widziałam

		• Nie widziałem/Nie widziałam • Nie jestem pewny/Nie jestem pewna
24	Jak ocenia Pan/Pani atrakcyjność “kupony” w procesie podejmowania decyzji <u>w czasie pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
25	Jak ocenia Pan/Pani atrakcyjność “kupony” w procesie podejmowania decyzji <u>w czasie po pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
26	Czy podczas zakupu produktów lub usług widział/a Pan/Pani oferty “kup jeden, drugi dostaniesz za darmo”?	• Widziałem/Widziałam • Nie widziałem/Nie widziałam • Nie jestem pewny/Nie jestem pewna
27	Jak ocenia Pan/Pani atrakcyjność “kup jeden, drugi dostaniesz za darmo” w procesie podejmowania decyzji <u>w czasie pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
28	Jak ocenia Pan/Pani atrakcyjność “kup jeden, drugi dostaniesz za darmo” w procesie podejmowania decyzji <u>w czasie po pandemii</u>?	• Bardzo atrakcyjne • Atrakcyjne • Neutralne • Nieatrakcyjne • Bardzo nieatrakcyjne
29	W jakim stopniu zgadzasz się z poniższymi stwierdzeniami. W czasie pandemii...	• Zdecydowanie się zgadzam • Zgadzam się

	- często odwiedzam sklepy (e-sklepy), które mają różne oferty promocyjne. - promocje zachęcają mnie do kupowania większej ilości produktów niż potrzebuję. - mam tendencję do kupowania produktów, które są objęte promocjami lub ofertami. - promocje sprzedaży mogą skłonić mnie do wypróbowania nowego produktu, którego zakupu w innym przypadku nie brałbym/brałabym pod uwagę. - często zapisuję się na powiadomienia e-mail lub sms ze sklepów, by być na bieżąco z nadchodzącymi promocjami sprzedaży. - częstotliwość promocji oferowanych przez sklep może wpływać na to, jak często robię w nim zakupy. - zwykle robię zapasy produktów podczas promocji, aby na dłuższą metę zaoszczędzić pieniądze. - unikam kupowania produktów przecenionych lub promocyjnych ze względu na obawy o ich niską jakość. - w przeszłości czułem/czułam się rozczarowany/rozczarowana, gdy promocja sprzedaży nie oferowała reklamowanej zniżki. - moje preferencje dotyczące ofert promocyjnych różnią się w zależności od rodzaju kupowanego produktu. - oferty promocyjne w ogóle nie wpływają na moją decyzję.	• Ani się zgadzam, ani nie zgadzam • Nie zgadzam się • Zdecydowanie się nie zgadzam •
30	W jakim stopniu zgadzasz się z poniższymi stwierdzeniami. Po pandemii...	• Zdecydowanie się zgadzam • Zgadzam się

	- często odwiedzam sklepy (e-sklepy), które mają różne oferty promocyjne. - promocje zachęcają mnie do kupowania większej ilości produktów niż potrzebuję. - mam tendencję do kupowania produktów, które są objęte promocjami lub ofertami. - promocje sprzedaży mogą skłonić mnie do wypróbowania nowego produktu, którego zakupu w innym przypadku nie brałbym/brałabym pod uwagę. - często zapisuję się na powiadomienia e-mail lub sms ze sklepów, by być na bieżąco z nadchodzącymi promocjami sprzedaży. - częstotliwość promocji oferowanych przez sklep może wpływać na to, jak często robię w nim zakupy. - zwykle robię zapasy produktów podczas promocji, aby na dłuższą metę zaoszczędzić pieniądze. - unikam kupowania produktów przecenionych lub promocyjnych ze względu na obawy o ich niską jakość. - w przeszłości czułem/czułam się rozczarowany/rozczarowana, gdy promocja sprzedaży nie oferowała reklamowanej zniżki. - moje preferencje dotyczące ofert promocyjnych różnią się w zależności od rodzaju kupowanego produktu. - oferty promocyjne w ogóle nie wpływają na moją decyzję.	• Ani się zgadzam, ani nie zgadzam • Nie zgadzam się • Zdecydowanie się nie zgadzam •
31	Z jakich ofert promocyjnych najczęściej korzystałby Pan/Pani przy zakupie produktu z podanych kategorii	• Zniżka cenowa • Łączenie produktów • Karty lojalnościowe

	produktowych? - Jedzenie, gospodarstwo domowe i zwierzęta domowe - Elektronika i biuro - Dom, meble i AGD - Odzież, buty i akcesoria - Zabawki, gry i gry wideo - Artykuły sportowe, ćwiczenia i fitness - Książki - Fotografie i sklep personalizowany - Apteka, zdrowie i wellness	• Karty lojalnościowe • Karty lojalnościowe • Inne • Żaden z nich
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Appendix 3. Online Survey Questions in Azerbaijani

No.	Survey Questions	Variants (Exact Text)
1	Yaşınız	• 18 yaşdan aşağı • 18-24 • 25-34 • 35-44 • 45-54 • 55 və yuxarı
2	Cinsiyyətiniz	• Qadın • Kişi • Digər • Paylaşmaq istəmirəm
3	Aşağıdakı kateqoriyalardan hansı sizin məşğulluq statusunuzu daha yaxşı təsvir edir?	• Həftədə 40 və daha çox saat işləyən • Həftədə 40 saatdan daha az işləyən • İşsiz, iş axtaran • İşsiz, iş axtarmayan • Təqaüdçü • Əlil və ya işləmə qabiliyyəti olmayan
4	Təhsil dərəcəniz	• Orta məktəb məzunu • Baklavr dərəcəsi • Magistr dərəcəsi • Doktorant
5	Aylıq ümumi gəliriniz nə qədərdir?	• 850 AZN-dən az • 850 -1700 AZN • 1700 - 3400 AZN • 3400 - 8500 AZN • 8500 AZN-dən çox • Paylaşmaq istəmirəm

6	Pandemiyadan sonrakı dövrdə hansı tezliklə alış-verişə edirsiniz?	• Hər gün • Həftədə 2-3 dəfə • Həftədə 1 dəfə • Ayda 2-3 dəfə • Ayda 1 dəfə • Daha az
7	Bir həftədə alış-verişə nə qədər vaxt sərf edirsiniz?	• 1 saatdan daha az • 1-3 saat • 4-6 saat • 7-10 saat • 10 saatdan daha çox
8	Məhsul və ya xidmətləri qiymətləndirərkən və ya satın alarkən qərar qəbul etmə prosesinizə hansı amillər təsir edir?	• Qiymət • Keyfiyyət • Təşviqedicilərlə təkliflər (bonus, iki al bir ödə, loyallıq kartı və.s) • Brendin reputasiyası • Xidmət və dəstək • Məkan • Məhsulun mağazada mövcudluğu • Digər
9	Alış-veriş davranışınız pandemiya dövrü ilə müqayisədə pandemiyadan sonrakı dövrdə dəyişibmi?	• Bəli • Xeyr
10	Zəhmət olmasa həmin dəyişiklikləri izah edin.	Açıq sual
11	Məhsul və ya xidmətlər alarkən hər hansı "qiymət endirimi" promosyonuna rast gəlmisinizmi?	• Bəli • Xeyr • Əmin deyiləm

12	<u>Pandemiya zamanı</u> qərar qəbul etmə prosesinizdə “qiymət endirimi” təklifinin cəlbədiciliyini necə qiymətləndirərdiniz?	• Çox cəlbədici • Cəlbədici • Neytral • Az cəlbədici • Çox az cəlbədici
13	<u>Pandemiyadan sonrakı dövrdə</u> qərar qəbul etmə prosesinizdə “qiymət endirimi” təklifinin cəlbədiciliyini necə qiymətləndirərdiniz?	• Çox cəlbədici • Cəlbədici • Neytral • Az cəlbədici • Çox az cəlbədici
14	Məhsul və ya xidmətlər alarkən hər hansı "loyallıq kartı" promosyonuna rast gəlmisinizmi?	• Bəli • Xeyr • Əmin deyiləm
15	<u>Pandemiya zamanı</u> qərar qəbul etmə prosesinizdə “loyallıq kartı” təklifinin cəlbədiciliyini necə qiymətləndirərdiniz?	• Çox cəlbədici • Cəlbədici • Neytral • Az cəlbədici • Çox az cəlbədici
16	<u>Pandemiyadan sonrakı dövrdə</u> qərar qəbul etmə prosesinizdə “loyallıq kartı” təklifinin cəlbədiciliyini necə qiymətləndirərdiniz?	• Çox cəlbədici • Cəlbədici • Neytral • Az cəlbədici • Çox az cəlbədici
17	Məhsul və ya xidmətlər alarkən hər hansı "ödənissiz sınaq" promosyonuna rast gəlmisinizmi?	• Bəli • Xeyr • Əmin deyiləm
18	<u>Pandemiya zamanı</u> qərar qəbul etmə prosesinizdə “ödənissiz sınaq” təklifinin cəlbədiciliyini necə qiymətləndirərdiniz?	• Çox cəlbədici • Cəlbədici • Neytral • Az cəlbədici

		• Çox az cəlbedici
19	<u>Pandemiyadan sonrakı dövrdə</u> qərar qəbul etmə prosesinizdə “ödənissiz sınaq” təklifinin cəlbediciliyini necə qiymətləndirərdiniz?	• Çox cəlbedici • Cəlbedici • Neytral • Az cəlbedici • Çox az cəlbedici
20	Məhsul və ya xidmətlər alarkən hər hansı "məhsulların birləşdirilməsi" promosyonuna rast gəlmisinizmi?	• Bəli • Xeyr • Əmin deyiləm
21	<u>Pandemiya zamanı</u> qərar qəbul etmə prosesinizdə “məhsulların birləşdirilməsi” təklifinin cəlbediciliyini necə qiymətləndirərdiniz?	• Çox cəlbedici • Cəlbedici • Neytral • Az cəlbedici • Çox az cəlbedici
22	<u>Pandemiyadan sonrakı dövrdə</u> qərar qəbul etmə prosesinizdə “məhsulların birləşdirilməsi” təklifinin cəlbediciliyini necə qiymətləndirərdiniz?	• Çox cəlbedici • Cəlbedici • Neytral • Az cəlbedici • Çox az cəlbedici
23	Məhsul və ya xidmətlər alarkən hər hansı "kupon və ya vauçer" promosyonuna rast gəlmisinizmi?	• Bəli • Xeyr • Əmin deyiləm
24	<u>Pandemiya zamanı</u> qərar qəbul etmə prosesinizdə “kupon və ya vauçer” təklifinin cəlbediciliyini necə qiymətləndirərdiniz?	• Çox cəlbedici • Cəlbedici • Neytral • Az cəlbedici • Çox az cəlbedici
25	<u>Pandemiyadan sonrakı dövrdə</u> qərar qəbul etmə prosesinizdə “kupon və ya	• Çox cəlbedici • Cəlbedici • Neytral

	vauçer” təklifinin cəlbediciliyini necə qiymətləndirərdiniz?	• Az cəlbedici • Çox az cəlbedici
26	Məhsul və ya xidmətlər alarkən hər hansı "birini alana digəri hədiyyə" promosyonuna rast gəlmisinizmi?	• Bəli • Xeyr • Əmin deyiləm
27	<u>Pandemiya zamanı</u> qərar qəbul etmə prosesinizdə “birini alana digəri hədiyyə” təklifinin cəlbediciliyini necə qiymətləndirərdiniz?	• Çox cəlbedici • Cəlbedici • Neytral • Az cəlbedici • Çox az cəlbedici
28	<u>Pandemiyadan sonrakı dövrdə</u> qərar qəbul etmə prosesinizdə “birini alana digəri hədiyyə” təklifinin cəlbediciliyini necə qiymətləndirərdiniz?	• Çox cəlbedici • Cəlbedici • Neytral • Az cəlbedici • Çox az cəlbedici
29	Aşağıda verilən ifadələrlə nə dərəcədə razısınız. Pandemiya zamanı... - mən tez-tez müxtəlif satış kampaniyaları təklifləri olan mağazalara (elektron mağazalara) gedirəm. - promosyon təklifləri məni ehtiyacımdan daha çox məhsul almağa təşviq edir. - mən promosyon təklifləri olan məhsulları almağa meylliyəm. - promosyon təklifləri məni almağı düşünmədiyim yeni bir məhsulu sınağa vadar edir. - bir mağaza tərəfindən təklif olunan satış promosyonlarının tezliyi orada nə qədər alış-veriş etdiyimə təsir edə bilər.	• Tamamilə razıyam • Razıyam • Neytral • Razı deyiləm • Qətiyyən razı deyiləm

	- mən uzun müddətdə pula qənaət etmək üçün satış kampaniyaları zamanı daha çox məhsul almağa meyl edirəm. - endirimli və ya promosyonlu məhsulların keyfiyyətinin aşağı olmasından narahat olduğum üçün almaqdan çəkinirəm. - keçmişdə promosyon təklifini reklam edib həmin təklifi məhsulu alarkən görməyəndə məyus olmuşdum. - promosyon təkliflərinin cəlbediciliyi mənim gözümdə məhsul kategoriyasına görə dəyişir. - promosyon təklifləri mənim qərarıma qətiyyən təsir etmir.	
30	Aşağıda verilən ifadələrlə nə dərəcədə razısınız. Pandemiya sonrası... - mən tez-tez müxtəlif satış kampaniyaları təklifləri olan mağazalara (elektron mağazalara) gedirəm. - promosyon təklifləri məni ehtiyacımdan daha çox məhsul almağa təşviq edir. - mən promosyon təklifləri olan məhsulları almağa meyliyəm. - promosyon təklifləri məni almağı düşünmədiyim yeni bir məhsulu sınağa vadar edir. - bir mağaza tərəfindən təklif olunan satış promosyonlarının tezliyi orada nə qədər alış-veriş etdiyimə təsir edə bilər. - mən uzun müddətdə pula qənaət etmək üçün satış kampaniyaları zamanı daha çox məhsul almağa meyl edirəm.	• Tamamilə razıyam • Razıyam • Neytral • Razi deyiləm • Qətiyyən razı deyiləm

	- endirimli və ya promosyonlu məhsulların keyfiyyətinin aşağı olmasından narahat olduğum üçün almaqdan çəkinirəm. - keçmişdə promosyon təklifini reklam edib həmin təklifi məhsulu alarkən görməyəndə məyus olmuşdum. - promosyon təkliflərinin cəlbediciliyi mənim gözümdə məhsul kategoriyasına görə dəyişir. - promosyon təklifləri mənim qərarıma qətiyyən təsir etmir.	
31	Təqdim olunan məhsul kateqoriyalarından məhsul alarkən ən çox hansı promosyon təkliflərini dəyərləndirməyə çalışırsınız? - Qida, məişət - Elektronika və Ofis - Ev, Mebel və Məişət texnikası - Geyim və Aksesuarlar - Oyuncaqlar, Oyunlar və Video Oyunlar - İdman məhsulları - Kitablar - Foto və Fərdi Dükən - Dərman preparatları, Səhiyyə və Sağlamlıq	• Qiymət endirim • Birləşdirilmiş məhsullar • Loyallıq kartı • Kupon və vauçer • Bir alana digəri hədiyyə • Digər • Heç biri

Appendix 4. Semi-Structured Interview Questions

No.	Interview Questions
The pandemic phase questions:	
1	What kind of changes did you detect in your purchasing habits during pandemic?
2	Did you prefer online or in-store purchasing during the pandemic situation? Why?
3	What were the vital factors that influence to buy a certain product during the pandemic? (Example: price, location, promotional offers, physical evidence, etc.,) Why?
4	Did you use to buy a product because of promotional offers? Why?
5	Tell us you any experience during the pandemic that you use promotional offers. What was the reason to use it?
6	Based on the following product categories, which the promotional offers did you use for buying a product before pandemic? Please explain your reasons for it. · Daily products: · Consumer electronic goods: · Style & Fashion: · Home appliance: · Health & Wellness:
The Post-pandemic phase questions:	
1	What kind of changes did you detect in your purchasing habits during pandemic?
2	Do you prefer online or in-store purchasing after the pandemic situation? Why?
3	What are the vital factors that influence to buy a certain product after the pandemic? (Example: price, location, promotional offers, physical evidence, etc.,) Why?
4	Do you purchase a product because of promotional offers? Why?
5	Tell us about your most recent experience after the pandemic that you use promotional offers. What was the reason to use it?
6	Based on the following product categories, which the promotional offers would you like to use for buying a product after pandemic? Please explain your reasons for it. · Daily products: · Consumer electronic goods: · Style & Fashion:

	· Home appliance: · Health & Wellness:
Socio-demographic Questions	
1	Age:
2	Gender:
3	Marital status:
4	Occupation:
5	Education level:
6	Monthly household income: