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Review Article

Maximizing Pharmacy Sales: The Impact of Promotional Strategies

Jassim Ahmad Al-Gasawneh, Abdullah A.M AlSokkar, Ahmed Alamro, Mohammed Binkhamis, Tahreer Abu Hmeidan, Moatasem Al-Dabbas

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Abstract

Objective: This study investigates the impact of various sales promotions on consumer purchasing behavior in pharmacy stores, specifically emphasizing discount promotions, point-of-purchase communication, and free trial samples. **Background:** The literature study reveals a deficiency in comprehending the long-term impacts of these strategies, particularly concerning the impact of product awareness on the AIDA model. **Method:** A quantitative research methodology was utilized to gather data from over 300 pharmacy users in Jordan, all of whom were a minimum of 18 years old. Participants individually completed structured questions, and the data analysis was performed utilizing the PLS-SEM methodology and Smart PLS 3 software, concentrating on validating the measurement model and examining structural relationships. Furthermore, internal consistency was evaluated by adhering to an HTMT ratio of 0.90. **Results:** The investigation has yielded significant empirical data that improves the understanding of sales promotions in the pharmaceutical industry, and the model facilitates the analysis of consumer behavior and the development of effective promotional strategies that can influence consumers and confer a competitive advantage in the market. The study indicates a substantial statistical correlation between the presence of discounted offers and consumer choices. Furthermore, the research indicates that point-of-purchase communication markedly enhances impulse purchasing and aids in differentiating products from competitors. Nonetheless, there is a noted decline in consumer reserves and the quantity of complimentary samples provided. **Conclusion:** According to these results, product awareness ranks high among the critical success elements for promotional activities. Therefore, to enhance sales and draw more customers, it is imperative to implement these strategies for pharmacy promotion and marketing.

Keywords: Sales Promotion Tools, Consumer Buying Behavior, Point-Of-Purchase Communication, AIDA Model, Pharmacy Retailing Strategies

INTRODUCTION

Marketing communication is a component of marketing and consumer buying behavior that, when effectively managed with strategic application of sales promotion insight, causes a significant shift in consumers' purchasing behavior in various industries, including the pharmaceutical industry. Pharmacies are applying several promotional techniques to overcome market challenges and enhance client engagement.[1,2] Promotional activities, particularly those applied within the sales retail context, have received significant research protocols and are publicized to have a high impact.[3,4] However, it is essential to mention that the pharmaceutical industry has its issues and potential benefits that are unveiled and need to be researched.[5-7]

Past studies have paid considerable attention to consumers' processing of promotions in the broad field of retailing, sometimes overlooking critical aspects of pharmacy retailing. Furthermore, there is a lack of studies that focus on the long-term effects of several promotional strategies in pharmacies while concentrating on one method, such as the price reduction strategy.[8,9] Unfortunately, there is a dearth of research in this regard, and Wouters et al. (2020) highlight the importance of developing a theoretical framework to clarify the psychological process at work to affect consumer behavioral responses to sales promotions.

This study aims to fill these research gaps by assessing the influence of the variables (discount offers, floor advertisements, and tasting coupons) on consumers' buying decisions in pharmacies. This study further expands upon the existing literature in several ways: This study will not only discuss the short-term impact of these strategies, but product awareness will also be gauged as a variable in the AIDA model of consumer behavior. Understanding these factors is critical for pharmacy managers and marketers to come up with proper promotion appeals that will capture customers.[10-12]

Consequently, this study provides a real-world supply of consumer data to provide empirical strength to the theoretical models that currently predetermine consumer behavior. This

Jassim Ahmad Al-Gasawneh*. University of Petra, Faculty of Administrative and Financial Sciences, Marketing Department, Jordan – Amman, jassim.algasawneh@uop.edu.jo
Abdullah A.M AlSokkar*. Applied Science Private University, Faculty of Business, Department of Marketing, Jordan – Amman, a_sokkar@asu.edu.jo
Ahmed Alamro. Al-Zaytoonah Jordan University, Faculty of Business, Department of Digital Marketing, Jordan – Amman, alamro@zuj.edu.jo
Mohammed Binkhamis. School of Business and Law, Dar Al-Hekma University, Jeddah, Saudi Arabia, mbinkhamis@dah.edu.sa
Tahreer Abu Hmeidan. Applied Science Private University, Faculty of Business, Department of Marketing, Jordan – Amman, t_abuhmeidan@asu.edu.jo
Moatasem Al-Dabbas. Balqa Applied University, College of Business, Jordan, Dr.mutasimdabbas@bau.edu.jo

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offers a clear, straightforward, and real-life understanding of how sales promotion practices work in the pharmaceutical industry. The results could be beneficial for establishing tailored advertisement strategies, which can be useful for pharmacies and may provide an edge.[13-15]

LITERATURE REVIEW

Methods for Promoting Sales

Several methods are used by pharmacies in sales, including over-counter sales marketing techniques such as discounts, coupons, loyalty programs, and free samples. Similarly, Kotler and Armstrong (2017) opine that discounts influence the volume of purchases to a significant extent, and people tend to purchase more often. Further, studies have revealed that the use of purchase coupons significantly influences customers' purchase behavior.[16] The current coupons encourage repeated purchases since they come with the provision of the amount of money that the consumer is to save. Interesting insights about client involvement and commitment emerged from Nair et al.'s (2024) study, where he examined the impact of sales promotion on pharmacies.[17] Furthermore, Khan et al. (2005) show that providing clients with a film freebie causes satisfaction with the product, thereby encouraging the consumer in his or her loyalty to the brand. Thus, the response of customers to the use of the different sales promotion strategies in the pharmacy retail context depends on factors such as age, gender, income, and health status.[18,19] Secăreanu et al. (2024) reported that young customers have higher pricing and coupon awareness than elderly customers, considering their recent study only. On the other hand, elderly clients care more about service and consider product ideas to be more valuable. This change actually retains the principles of the original script while enhancing the relationship between the two contrasting ideas.[20,21] It is possible that the theories presented in the study, which are believed to influence sales promotion in pharmacies, actually illustrate the promotional activities and customer behavior in response to these strategies.[22-25] According to Nair et al. (2024), pharmacists' knowledge of information competitive strategies and marketplace structuring should become fundamental in order to gain a customer base. In the current context of sales merchandising, pharmacists must adhere to the rules, regulations, and ethical considerations when selling pharmacy items to their target consumers.[17]

Price Discounts

At some point, Monroe and Krishnan (1985) state that a discount indicates a reduction in the original cost of special products.[26] Dodds et al. (1991) described price reduction as an evaluation of value that entails making other products available for purchase at a cheaper price to allow clients to afford some goods. A way to lower prices is by adjusting the cost based on volume.[27] This strategy is critical for influencing consumer behavior to purchase the offered merchandise. In their paper, Chandon et al. (2000) mentioned that it is possible to identify the connection between the steps taken by the company to promote sales and the consumers' buying behaviors, and one of the most effective instruments of customer management is discount pricing.[28] This account correlates with the views expressed by Chen and Chen (2019) regarding the widespread application of price discounts in advertising. These sales promotion strategies are intended to attract consumers seeking something more or a bonus out of a makeover when using the item that is being advertised. Promotion is an effective weapon in the hands of the pharmacy to attract the consumer's attention to its products and, therefore, increase revenue.[29] In Zeithaml's (1988) opinion, the decreased fee attracts people with a price-sensitive personality, whereas the promotion of a product or service sparks clients' interests.[30] Of course, retail providers such as pharmacies benefit from the increase in traffic. Several authors, such as Kim and Forsythe (2007) and Adeleh and Eleyan (2021), established that discounts serve the purpose of enhancing the flow of demand, customer awareness, and ultimately consumption.[31,32] Similarly, Dall'Olmo Riley et al. (2015) analyzed the relationship between a price decrease and the decision to make or not make a purchase, and according to the cross-sectional research findings, price discounts have a direct and mediated effect on purchase intention.[33] Another recent study by Kumar et al. (2023) highlighted the impact of prices and, more specifically, price reductions on purchase intention. It also examined aspects of price promotion and their relationship to product familiarity.[34] Ghose and Ipeirotis (2010) made these suggestions because they found the idea that lower prices were inversely proportional to product recognition fascinating.[35] In their own research, the study identified a positive correlation between the level of price cuts and the level of brand recognition. This may be so because the discounts have the advantages of grabbing the attention of consumers and, at the same time, increasing their understanding of the product.[35] Writing about motivational drivers for consumers, Racherla and Friske (2012) pointed out that promotional discounts may affect the perception of consumers regarding the attractiveness and demand levels of a product.[36]

Point-of-Purchase Displays

Danaher et al. (2015) found a close relationship between promotion and distribution through the use of point-of-purchase advertising, also known as merchandising. This approach fosters a positive relationship and facilitates smooth interaction with customers at every interface. The essence of point-of-purchase advertising is the fact that customer characteristics such as place, product, price, and others determine customer decision-making within a community, as well as the advertisement of a point-of-sale product. This strategy is normally regarded as the most basic technique of sales promotion. Promotional communication, which targets the promotion of product information at the various touch points at which the purchase decision process occurs, is known as point-of-purchase advertising. Examples include window displays, counter displays, floor and wall displays, streamers, and posts; POP materials such as vitamin racks, floor stickers for flu season promotions, and countertop displays for new supplements are commonly used.[37] Based on Caruelle et al. (2024), purchase displays remain vital factors for brand

marketers because they can influence the actual behavior of customers. Their perspectives on this matter vary significantly. Additionally, when examining this analysis, attention should be paid to different timings, particularly those where the customer becomes more focused, and brand finalization occurs. This is the moment when all the components of the sale come together: the customer, the money, and the product.[38] Karpyn et al. (2020) state that point-of-purchase displays have the potential to influence the consumer's purchase decision positively, making them an important area for promoting health. By focusing on increasing sales and customer recognition, pharmacies can more strategically measure the effects of POP presentations and refine their marketing strategies.[39] The latter should focus on such issues as prioritizing health concerns, effective consumer engagement, and product promotion.[40] Understanding the return on investment (ROI) of the point-of-purchase display assists the manager in effectively allocating resources and boosting sales revenue in pharmacies.[40] The conventional method involves placing the advertising pieces obtained from the marketers at the point of purchase.

Free Samples

Leaflets containing free samples are one of the most popular forms of sales promotions within the pharmaceutical industry's outlets, to present customers with new products, encourage them to try the products offered, and, therefore, increase sales. The literature review focusses on the effects of free samples on consumers' behavior and choices.[41] Pharmacies may distribute samples for dermatology creams or pediatric syrups to encourage trial. This article examines the use of free samples as a promotion tool. In this aspect, it shows how consumers can be encouraged to open a product, focus on it, and ultimately buy it. Verma et al. (2016), in their study, noted that a free trial of pharmaceutical products was key to engaging the customer and making them experiment. Some previous studies have established that the provision of free samples has profound effects on consumers' buying behavior.[42] Free samples aim to minimize the risk that potential buyers may face and provide a chance to try the product, which positively changes their perception.[43] According to Brown and Krishna (2024), the diverse properties of the substance and its administration methods make it beneficial to categorize delivery systems based on the overall form of the final product. This strategy of sales promotion may effectively attract the consumer's attention and stimulate consumption desire. Potential buyers of pharmacy products and services thus get to know the quality, making free samples a popular tool among pharmacies.[44] Using the view of authors Smith et al. (2012), it was revealed that the target customers who tasted the dry sachets are most likely to buy the product again and often recommend it to others.[45] Promotional gifts enhance customer satisfaction and loyalty, product purchase rates, and customer loyalty (Link & Smith, 2020). Sedliacikova et al. (2020) discuss some of the relationships that exist between the use of free samples and customers' purchasing behavior. They discovered the impact of product sampling on the intention to buy.[46] The sales promotion tools had a positive influence on the customer's buying decision, as elaborated by Reza et al. (2021), who conducted an examination of the impact of free samples and transaction convenience on purchase decisions.[47]

Product Awareness

Keller (1993) revealed that product knowledge is a key determinant of the level of engagement of clients in marketing. The last form of down utilization is concerned with the extent of the buyer's knowledge of the product, what it is, and why it exists in the first place.[48,49] This understanding is not merely a theoretical concept but rather a quantitative measure of the ease with which consumers can recognize or recall a particular brand.[50-53] Central to effective promotional strategies is the AIDA model, which encompasses the key stages of consumer engagement. This model poses the question: Are you effectively catching the attention of target consumers, stimulating interest, desiring a product, and persuading them to take action?. This model is very useful to marketers because it serves as a map and checklist for achieving promotional objectives.[54] In general, it all starts with capturing the consumer's attention or awareness, which plays a crucial role in their decision-making process; pharmacy awareness campaigns often involve informative leaflets on proper drug usage attached to promotional items. Thus, the model highlights the importance of generating interest, fostering desire, and ultimately encouraging decision-making. Song et al. (2021) noted that marketing and advertising frequently use the AIDA model to trace the consumer's journey from awareness to purchase. This progression is not random but rather a well-calculated process. Clear goals and strategies align with this well-calculated trail, not a random progression, keeping consumers informed before they decide to purchase a product. As consumers progress through the AIDA model, their understanding of the product also deepens.[55] Keller's (1993) view is clear by pointing out that to achieve this goal, the actual characteristics of the product, the functions that it can serve, and the benefits that can be derived from its use should be communicated effectively.[48] To this end, it is necessary to define the concept of "desire" as distinguished.[55] Ferrell et al. (2022) state that the purchase decision, the final stage of the AIDA model, translates the consumer's intention into an action.[56] The literature documents the role of sales promotion instruments in driving purchase decisions and enhancing purchase awareness.[57-61] This is why the current research is relevant, as earlier research indicated the link between awareness and decision-making.[62,63] In other words, understanding and applying the relationship between product consciousness and action is an academic exercise and, at the same time, a formidable resource in the intensely competitive world of marketing. In this way, with the help of the AIDA model, marketers can tightly control the sequence of consumers' thoughts and, having turned their attention to a certain brand, gain results.

Purchase Decision

The purchase decision is the culmination of consumer behavior, involving knowledge, evaluation, and choice. According to Kotler and Keller (2015), a purposeful buying decision utilizes information to evaluate different products and make a final decision.[64] As noted by Neufeld (2018), various factors—

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cultural, social, personal, and psychological—affect this complex decision-making process.[65] Panwar et al. (2019) adds that consumers decisions are also influenced by peers, state of mind, and feelings.[66] Consumer decision-making involves three stages: input, processing, and results. The input stage influenced by marketing strategies, family, and social institutions, triggers the identification of needs, pre-purchase information search, alternative evaluation. According to Neufeld (2018), sales promotions have the ability to attract clients who generate income.[65] Kotler and Keller (2015) delineate a purchase choice process comprising many stages: issue and need identification, gathering of information, assessment of different options, decision-making, and subsequent satisfaction after the purchase.[64] The consumer behavior model elucidates the process by which customers perceive and make choices, starting with recognizing their needs and culminating in post-purchase satisfaction. Marketers play a crucial role in managing cognitive dissonance to secure future business. Making a buying choice is a complex process that depends on several aspects. Gaining a comprehensive understanding of this process enables marketers to effectively address customer demands and steer them through the decision-making process, thereby improving satisfaction and fostering loyalty.

CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Sales promotion strategies exert a direct and indirect impact on the target audience's behavior. The present study provides a comprehensive analysis of the existing scholarly literature, specifically in the pharmaceutical market. These findings form a favorable basis for the study's conceptual framework, which seeks to experimentally examine such relations using the AIDA model. Using both theory and facts, the strategy, which serves as a theoretical framework, aims to explain interactions between promotional activities and their impact on product familiarity and purchase. Transitioning from a literature review to a framework not only fills knowledge gaps, but also provides an orderly procedure to check and enhance understanding of pharmaceutical sales promotion. Figure 1 below represents the conceptual framework of the study.

Price discount and customer purchase decision

Having analyzed the existing literature, one can conclude that price cuts have a great impact on consumers. According to Darke and Chung (2005), the choices customers make inside a retail store reveal that applying a discount price impacts a

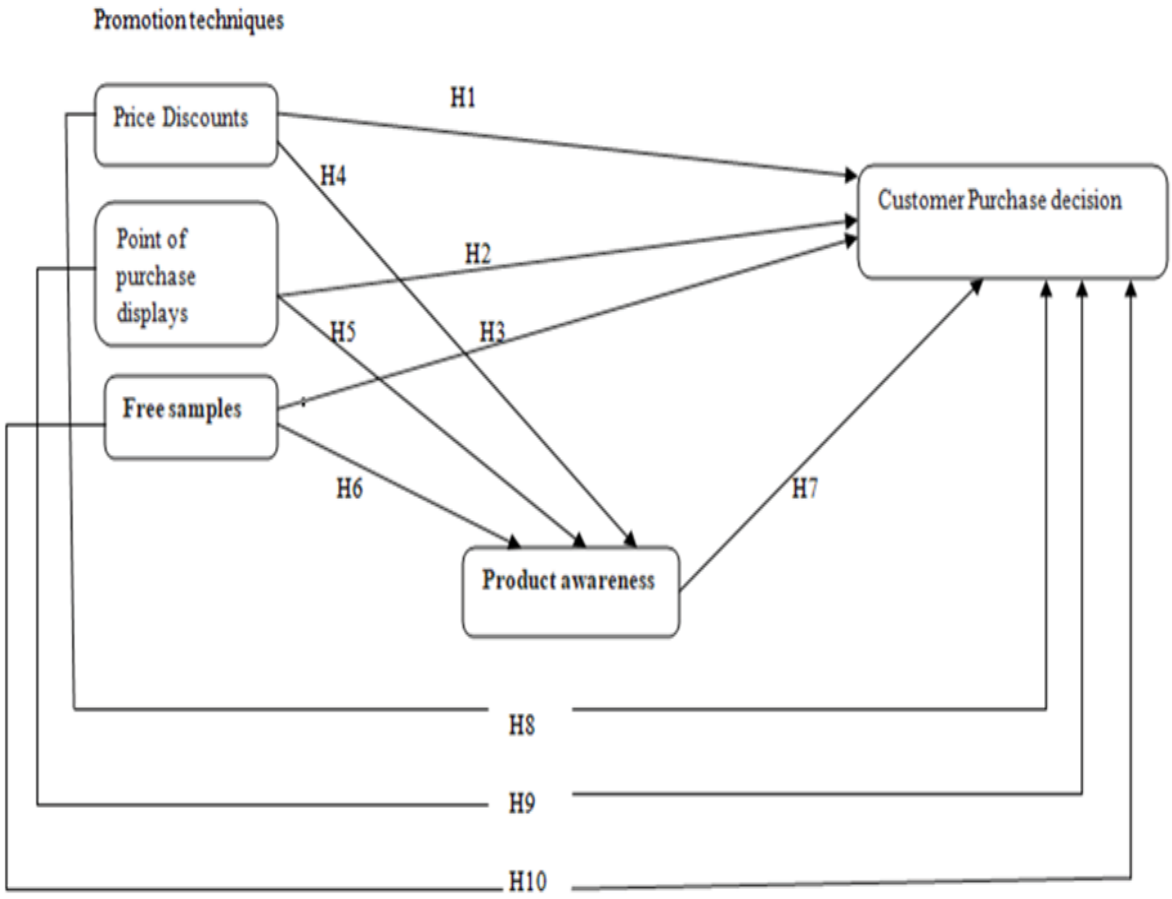

Figure 1. Conceptual Framework

purchase.[57,67] Similarly, Cheema and Papatla (2010) discovered the same kind of variation in online shopping, establishing that low prices exert significant pressure on immediate consumption.[68] Research in the pharmacy sector, specifically targeting price discounts, is significantly lacking. Even though the literature on this topic is quite extensive, there are very few studies that focus solely on the independent variables in the context of pharmacies.[69] Accordingly, the following hypothesis (H1) was developed. **H1** Prices discount has a positive impact on customer purchase decisions.

Point of purchase display and customer purchase decision

Point-of-Sale (POS) displays have been recognized to play an important part in consumers' behavior. For example, Inmar et al. (2009), in their recent study, affirmed the role of proper signage in determining impulse buying.[70] Similarly, Chevalier (1975) found that displays were of particular importance and contributed to the increasing viewability and visibility of products to clients.[71] However, the existing literature on the impact of point-of-purchase displays, particularly in the context of pharmacies, is still quite scarce.[72] Accordingly, the following hypothesis (H2) was developed. **H2** Point-of-purchase displays have a positive impact on customer purchase decisions.

Free samples on consumers purchase decision

As can be clearly seen, free samples affect the selection of matters and alter people's decision-making. Brown and Krishna (2004), in their studies, also depicted that the sample created a near-perfect probability of purchase.[44] However, as Wilson noted in 2015, additional samples have similarities to customers, which means that the samples have the ability to alter the customers' resistance to new items and may require less effort.[73] However, there is still a lack of adequate discussion on the complementary use of samples for promotion and advertisement within the literature on pharmaceutical industries and sectors.[44] Accordingly, the following hypothesis (H3) was developed. **H3** Free samples have a positive impact on customer purchase decisions.

Price discount and consumer product awareness

As the various studies show, the low-cost products are useful for attracting consumers' attention and increasing their awareness of particular merchandise. As pointed out by Gourville & Soman (2002), information concerning discounts makes consumers aware of the characteristics of a product[74] (see [75]). Furthermore, Adeleh and Eleyan's (2021) research shows that discounts have a positive impact on product awareness.[32] According to Chen & Chen (2019), the literature on previous efforts to boost product awareness by slashing prices in an attempt to achieve improved market penetration and coverage is somewhat scarce, especially in relation to the role of such strategies in influencing the pharmaceutical market and their application within a significantly specialized sub-sector of that market.[29] Considering this, the following hypothesis (H4) was developed. **H4** Price discount has a positive impact on consumer product awareness.

Point of purchase display and product awareness

Studies in the literature reveal that point-of-purchase displays, such as advertisements, do enhance awareness of a product. For example, Rehman and Shabbir (2020) found that these displays can build product publicity with practical information and competence.[40] Nyanchoka et al. (2020) carried out a related study in a different context and time, in which they also anticipated that displays have a very significant role to play in raising brand awareness.[76] However, Rehman and Shabbir (2020) observed that there was a dearth of literature regarding these determinants and their consequences in general and within the pharmaceutical industry in particular.[40] Accordingly, the following hypothesis (H5) was developed. **H5** point-of-purchase displays have a positive impact on product awareness.

Free samples and product awareness

Free samples have received appreciation as an efficient way of raising product awareness and familiarity. Brown and Krishna (2024) explained that using free samples can be a highly effective way of introducing customers to the product.[44] Wilson (2015) established that free sample campaigns enhanced the understanding of a product's characteristics.[73] Although researchers have strived to investigate the topic, research on the impact of free samples on product awareness in pharmacies is still limited and relatively insignificant.[43] Accordingly, the following hypothesis (H6) was developed. **H6** free samples have a positive impact on customer awareness.

Product awareness and customer purchase decisions.

Almost all marketing theories acknowledge the relationship between product familiarity and consumers' buying decisions and behaviors. As noted by Keller (1993), brand awareness is a critical aspect of brand equity, predisposing customers to behave in certain ways towards brands.[48] Furthermore, Aaker (2009) also found evidential support for the importance of information as the mechanism through which it works on preferences leading to purchase.[50] However, there is a need to sort out and have broader and deeper insights in order to understand the extent of the relationship between product knowledge and consumers' buying behavior in the pharmaceutical industry.[77] Accordingly, the following hypothesis (H7) was developed. **H7** Product awareness has a positive impact on customer purchasing decisions.

The mediating role of Product awareness between Price discounts and influences purchase decisions

In some cases, researchers have discovered that a consumer's awareness of a product means that sales promotions can influence their buying patterns. According to Kotler and Keller (2015), promotion plays a central role, stemming from the logic that awareness fuels action. They have also established that awareness contributes to the promotion of a campaign.[64] The current research findings are useful in giving a background on the effect of product awareness on customer buying behavior with regard to price-cut offers in the pharmacy retailing section. Other work also supported the proposition that customers' buying behavior is a result of trialing products.[78] Hence, the following hypothesis (H8) was developed. **H8** Product awareness mediates the relationship between Price discounts and influences purchase decisions

The mediating role of Product awareness between point-of-purchase displays and purchase behavior

It has been recommended that the use of visual prompts in product presentation can enhance the level of customer perceptiveness and, in the process, increase sales. Nyanchoka et al. (2020) conducted a recent study, and they established that displays affect the way that information about a product is presented significantly.[76] Rehman and Shabbir (2020) have undertaken research that shows that POS displays are critical in shaping the consumer's perception of brand personality.[40] Other scholars, for instance, the researchers cited in the study by Amberg and Fogarassy (2019), have urged further research on the relationship between POP displays and consumer decision-making. In particular, they underline the importance of examining the effects of information in advertising on this relationship.[78] Accordingly, the following hypothesis (H9) was developed.**H9** Product awareness mediates the relationship between point-of-purchase displays and influences purchase decisions.

The mediating role of Product awareness between Free samples and purchase decisions

Brown and Krishna (2024) agree that free samples are beneficial for introducing products to customers.[44] Wilson (2015) established that free sample campaigns boost consumers' awareness of specific product features.[73] Amberg and Fogarassy (2019), pointed out that the existing literature has not extensively investigated the role of product awareness in shaping the customers' perceived behaviors during free sample offerings.[78] **H10** aims to establish the impact of product familiarity and free sample distribution on customer consumption patterns at pharmacies for planned products. **H10** Product awareness mediates the relationship between Free samples and purchase decisions.

METHODOLOGY

Study Framework

This research employs a quantitative research method to assess the impact of sales promotion tools on customers' buying behavior in Jordanian pharmacies. In particular, the research is based on product awareness as a moderate variable. Data was collected from pharmacy customers using a structured questionnaire.

Population and Sampling

The participants in this study were selected based on the following criteria: they are frequent visitors to Jordanian pharmacies and must be at least 22 years old. This group was segmented on the basis of their buying behavior. Thus, the participants in the research were selected using convenience sampling. As suggested by Krejcie and Morgan (1970) and Hair et al. (2019), the minimum number of participants should be more than 300. This sample size helps in the overall assessment of the findings and also assists in assessing the generalizability of the outcomes.[79,80]

Measurements

The data was collected using self-administered questionnaires. The questionnaire was divided into four sections: Individuals' personal and demographic details, such as age, gender, marital status, education level, and others, comprise the data. A Likert-type scale with 5 points was utilized to make promotional appeals such as price reductions, eye-catching labels at the point of sale, and free samples. To measure the frequency of product awareness, we borrowed items from previous studies and slightly tweaked them. Customer purchase decisions were evaluated using items that were developed and altered based on the literature review. In addition, some general questionnaire items were to align with the objectives of this type of research. To ensure the validity of the content, external experts have reviewed all questionnaire items.

Validity and Reliability

Regarding content validity, we invited external scholars to evaluate the items of our questionnaire to make sure that they were valid and complete. As in prior studies, the current work verified the convergent validity by using the average variance extracted (AVE) and composite reliability (CR). Both of the metrics' values were above the suggested thresholds of 0.5 and 0. As Hair et al. (2019) suggested keeping factors at 0.7.[80] The heterotrait-monotrait ratio (HTMT) was applied to test discriminant validity, with all values falling below 0.90, as recommended by Henseler et al. in 2015.[81] All constructs yielded values above 0.7, indicating high internal reliability as measured by Cronbach's alpha. The scrupulous validation procedure lends credibility to our research, which provides important information on consumers in the pharmaceutical market.

Data Collection Procedure

The questionnaires were distributed to the customers of pharmacies in Jordan. Participants in the study were identified, agreed to participate, and signed a consent form before the commencement of the study. To enhance the response rates, the questionnaires were collected immediately after being distributed to the respondents.

Data Analysis

The data collected for this study were analyzed with the help of partial least squares structural equation modelling (PLS-SEM) with the software Smart PLS .0. We rigorously assessed the measurement model in the present study to ensure its validity and reliability. We also subjected the structural model to a series of tests to analyze the relevance of the proposed relationships. We used the bootstrapping technique to conduct a moderating analysis of product awareness to control for the effects of high and low levels of awareness.

ANALYSIS AND RESULTS

To develop the inner and outer models, the study utilized Smart-PLS path modeling. The measurement model was employed to establish the constructs' reliability. Bivariate

correlation analysis and simultaneous regression analysis were used to assess the correlations and, consequently, the effects of the relationship between the constructs.

Reliability and Convergent Validity (CV) of The Overall Model

The Cronbach's alpha and CV scores for the entire CFA model is shown in Table 1.

As shown in Table 1, the initially standardized factor loadings of the model items were between 0.955 and 0.710. Based on Hair et al. (2019), these loadings were higher than the recommended cut-off value of 0.7. Also displayed in the table, the values obtained for AVE were between 0.840 and 0.622. Based on Hair et al. (2019), these values were greater than the recommended cut-off value of 0.5. Additionally, CR values were between 0.967 and 0. 844. Based on Hair et al. (2019), these values were greater than the recommended cut-off value of 0.7.[80]

The Table 2 shows the Heterotrait-Monotrait ration (HTMT) values of the overall model's latent constructs, which ranged from 0. 080 to 0. 821. Henseler et al. (2015) recommended a threshold of 90 for HTMT values to confirm discriminant validity, and our results fall below this limit, providing evidence of discriminant validity for all measurements of the latent constructs.[81] Thus, the overall measurement model offers clear evidence of both convergent validity and discriminant validity. The measurement scale appears to adequately measure the constructs and items included in the overall model.

Hypothesis Testing

In the structural model, we considered factors linked to sales promotion and their effects on consumers' buying decisions. This study examined how these techniques, as external variables, affect the internal variables of customer behavior. Furthermore, in our study, we explored the role of purchase

Table 1. Cronbach's alpha CV and CFA model

First order Construct	Items	Factor loading	CR	AVE
Price discounts (PD)	PD 1	0.910	0.939	0.794
	PD 2	0.896		
	PD 3	0.887		
	PD 4	0.881		
	PD 5	0.863		
Point-of-purchase-displays (PPD)	PPD 1	0.866	0.961	0.860
	PPD 2	0.873		
	PPD 3	0.877		
	PPD 4	0.785		
	PPD 5	0.765		
Free samples (FS)	FS 1	0.883	0.946	0.780
	FS 2	0.881		
	FS 3	0.879		
	FS 4	0.878		
	FS 5	0.838		
Product awareness (PA)	PA 1	0.815	0.906	0.762
	PA 2	0.856		
	PA 3	0.873		
	PA 4	0.875		
	PA 5	0.843		
Customer purchase decisions	CPD 1	0.850	0.844	0.731
	CPD 2	0.812		
	CPD 3	0.870		
	CPD 4	0.871		
	CPD 5	0.764		
Second Order Constructs				
Sales Promotion Techniques	Price discounts	0.955	0.946	0.814
	Point of purchase displays	0.909		
	Free samples	0.766		

Table 2. HTMT results for the discriminant validity of the overall measurement model

	PD	PPD	FS	PA	CPT	CPD
PD						
PPD	0.565					
FS	0.833	0.545				
PA	0.234	0.131	0.177			
CPT	0.655	0.876	0.621	0.477		
CPD	0.788	0.876	0.743	0.122	0.811	

decisions, with sales promotion techniques and customer purchase decisions being central to our analysis. Table 3 lists a summary of the statistical tests for each hypothesis, discussed below.

H1: Prices discount has a positive impact on customer purchase decisions.

In testing Hypothesis **H1**, the finding was that PD had a significant effect on CPD with a t-value of 3.150 and a p-value of 0.004. These results provide a suggestion that there is a very small possibility of getting such a t-value of 4. 712 by chance, which is 0. 004, which means that the relationship is statistically significant at 0. At a 0.05 level of significance (one-tailed). The regression weight of PD for CPD was also significantly different from zero, with a positive standardized path coefficient of 0.2.225. This gives support to H1; thus, a one-unit increase in the standard deviation of PD leads to an increase of 0.225 SD in CPD. The results show that the use of discount pricing increases consumer purchase intention and are in accordance with previous research that explains the effects of pricing reductions on consumer behavior in the retail sector.

H2: Point-of-purchase displays have a positive impact on customer purchase decisions.

In testing hypothesis **H2**, the analysis revealed that point-of-purchase displays (PPD) have a positive and significant effect on customer purchase decisions (CPD) with a t-value of 2. The second set of comparisons was made with a Mann-Whitney U-test, giving a U-value of 550 and a p-value of 0.001. This means that there is a very high level of significance in the relationship with such a t-value, which can only be obtained by chance (0.001 times out of 1000). Furthermore, it was established that the regression weight of PPD in the prediction of CPD was significantly different from zero and had a positive directional path coefficient of 0.225. This is in consonance with H2, meaning that a one-standard deviation rise in PPD leads to a rise of 0.225 SD in CPD. The implication of the study is that the strategic use of visual merchandising will help to improve consumer engagement and purchase behavior.

H3: Free samples have a positive impact on customer purchase decisions.

When testing Hypothesis **H3** the analysis indicated that the free samples (FS) have a strong positive association with the customer purchase decision (CPD) with a t-value of 5.191. With an effect size of 0.050 and a p-value of 0.001. The findings indicate that the probability of getting such a t-value by random chance is very remote, at 0.001 probability. These findings suggest that the regression coefficient of FS in relation to CPD is statistically significant at the 0.05 significance level (one-tailed). The findings of this study therefore show a p-value of less than 0.05, suggesting a positive correlation to a certain extent. The standardized coefficients (β) were estimated to be 0.244, supporting **H3**. The findings indicate that an increase in FS enhances CPD to a large extent.

H4: Price discount has a positive impact on consumer product awareness.

For Hypothesis **H4** testing, PD scored a t-value of 4.765 and a p-value of 0.004 for CPD prediction. These results imply a

Table 3. Hypotheses Test Results

Hypothesis	Description	Path Coefficient (β)	t-value	p-value	Significance Level	Supported?
H1	DP → CPD	0.225	3.150	0.004	0.05	Yes
H2	PPD → CPD	0.225	2.550	0.001	0.05	Yes
H3	FS → CPD	0.244	5.191	0.001	0.05	Yes
H4	DP → PA	0.265	4.765	0.004	0.05	Yes
H5	PPD → PA	0.321	3.879	0.003	0.05	Yes
H6	FS → PA	0.343	3.564	0.001	0.05	Yes
H7	PA → CPD	0.322	3.458	0.003	0.05	Yes
H8	PA moderates PD and CPD	0.532	3.410	0.001	0.05	Yes
H9	PPD moderates PD and CPD	0.431	3.765	0.002	0.05	Yes
H10	FS moderates PD and CPD	0.536	2.679	0.004	0.05	Yes

0.003 likelihood of obtaining a t-value as large as 3.260 for the absolute value. The results also showed that the regression weight of PD in PA prediction significantly varied from zero at the 0.05 significance level (one-tailed). When the p-value was less than 0.05, specifically 0.004, a positive relationship emerged with a path coefficient of 0.265, thereby supporting H4. The results indicate that a 1 in standard deviation (SD) increase in PD will result in a 4.765 in SD increase in PA.

H5: **Point-of-purchase displays have a positive impact on product awareness.**

For Hypothesis **H5** testing, PPD scored a t-value of 3.879 and a p-value of 0.003 for PA prediction. These results imply a 0.003 likelihood of obtaining a t-value as large as 3.260 for the absolute value. The results also showed that the regression weight of PPD in PA prediction significantly varied from zero at the 0.05 significance level (one-tailed). When the p-value was less than 0.05, specifically 0.003, a positive relationship emerged with a path coefficient of 0.321, thereby supporting **H5**. The results indicate that a 1 in standard deviation (SD) increase in PPD will result in a 3.879 in SD increase in PA.

H6: Free samples have a positive impact on customer awareness.

For Hypothesis H**6** testing, FS scored a t-value of 3.564 and a p-value of 0.001 for PA prediction. These results imply a 0.001 likelihood of obtaining a t-value as large as 3.564 for the absolute value. The results also showed that the regression weight of FS in PA prediction significantly varied from zero at the 0.05 significance level (one-tailed). When the p-value was less than 0.05, it formed a positive relationship with a path coefficient of 0.343, thereby supporting **H6**. The results indicate that a 1 in standard deviation (SD) increase in FS will result in a 3.564 in SD increase in PA.

H7: Product awareness has a positive impact on customer purchasing decisions.

For hypothesis H**7** testing, PA scored a t-value of 3.458 and a p-value of 0.003 for CPD prediction. These results imply a 0.003 likelihood of obtaining a t-value as large as 3.260 for the absolute value. The results also showed that the regression weight of PA in CPD prediction significantly varied from zero at the 0.05 significance level (one-tailed). When the p-value was less than 0.05, it formed a positive relationship with a path coefficient of 0.322, thereby supporting **H7**. As can be construed from the results, the increase of PA by 1 in standard deviation (SD) will increase CPD by 3.458 in SD.

H8: Product awareness mediates the relationship between Price discounts and influences purchase decisions

Hypothesis H**8**. The findings of the accumulated research studies showed that product awareness (PA) expressed a positive and profound impact on the correlation between price discounts (PD) and customer purchase decisions (CPD) at the 0.05 level of significance (β = 0. 532, t = 3. 410, p = 0.001). Furthermore, the outcome of the study showed that there was no overlap between the confidence intervals of the lower level (LL = 0.042) and the upper level (UL = 0.543). Therefore, the results presented in the paper support **H8** of this study.

H9: Product awareness mediates the relationship between point-of-purchase displays and influences purchase decisions.

The results of Hypothesis H**9**, the bootstrapping analysis showed that there is significance to point-of- Product awareness in mediating the relationship between point-of-purchase displays and customers' purchase decisions (CPD). It was established that this effect was statistically significant at 0. The results are at the 05 level, with a beta coefficient of 0.431, a t-value of 3.765, and a p-value of 0.002. The findings of the current study showed that the lower-level (LL = 0.058) and upper-level (UL = 0.661) confidence intervals did not cross zero. The results imply that Product awareness has mediated the relationship between point-of-purchase displays and CPD, hence supporting **H9**.

H10: Product awareness mediates the relationship between Free samples and purchase decisions.

For Hypothesis H**10**, the analysis of bootstrapping showed that Product awareness significantly influenced the linkage between Free samples and customer purchase decision (CPD). This effect was found to be positive and significant at 0. The result of the study was statistically significant at the 0.05 level of significance with a β value of 0. 536, a t-value of 2. 679, and a p-value of 0.004. When testing Hypothesis H**3**, the analysis revealed that the free samples (FS) have a significant positive relationship with the customer purchase decision (CPD).

P-value: represents the probability of errors of less than 0.05 T-value (one tail) > The standard beta is 1.645, falling between 1 and -1. Interval confidence: Lower Level (LL): 2.5%, Upper Level (UL): 97.5%; T-value: two tails > 1.96; p-value < 0.05; Standard (β) between 1.-1.

DISCUSSION

In this paper, we investigate theories associated with sales promotion and their effects on consumers' purchase decisions in the pharma-selling business, particularly pharmacies. Discount offers, point-of-purchase (POP) displays, and free samples are some of the variables that the research uses to examine consumer behavior. Thus, this study is a valuable contribution to the current body of knowledge on promotion within the context of the pharmaceutical environment, which has been predominantly paid relatively little attention as opposed to other retail contexts.

Special Deals

This study has focused on the job that price discounts do in acting as a tool in choosing and is in line with the observation made regarding the influence of price competition by Brown & Krishna (2004), who claim that price competition is central to the behavior of consumers both in the physical and online markets.[44] This finding supports the hypothesis H1 of this research framework, acknowledging that price cuts affect consumers' buying behavior of medicines in pharmacies. This hypothesis stresses the strategy of offering discounts to attract

customers and stimulate pharmacy sales. Point-of-sale (POS) displays have been recognized to play an important part in consumers' behavior. For example, Inman et al. (2009), in their recent study, affirmed the role of proper signage in determining impulse buying.[70] Similarly, Chevalier (1975) found that displays were of particular importance and contributed to the increasing viewability and visibility of products to clients.[71] However, the existing literature on the impact of point-of-purchase displays, particularly in pharmacies, is still quite scarce.

Point-of-Purchase Displays

This paper also brings out the aspects of point-of-purchase display as being a major influence on the decision-making of consumers. This research links with the work done by Cheavlier (1975) and Patel Inmar et al (2009), where this research focusses on the role of visual merchandising in the enhancement of sales and impulse buying behavior among customers.[71] As pointed out by Curran and Meuter in 2007, POP displays, most especially in pharmaceutical marketing communication, have not been so prominent or gained as much attention.[72] This research will show the role of these displays in enhancing brand recognition and customer purchasing.

Free Samples

Research by Wilson in 2015 and Brown and Krishna in 2024 suggested that free samples are highly effective in persuading customers to try products make purchases.[44,73] This finding supports hypothesis H3, which posits that free samples impact consumer purchase behavior. Brown and Krishna in 2024 also noted that free samples can enhance repeat purchases by reducing customer hesitation;[44] these are often offered for new generic brands or wellness products during campaigns.

Product Awareness

The study links promotional elements and consumer purchasing behavior with product awareness. It supports the studies by White and Dahl in 2006, Wilson 2015, Brown and Krishna in 2024 regarding the impact of product awareness on the customer interaction and purchase.[43,44,73] Furthermore, the study also establishes the relationship between awareness and the effectiveness of sales promotions, as postulated in hypotheses H8 and H9.

Contributions

The study offers several key contributions to the literature on marketing communication and consumer behavior in the pharmaceutical industry. The findings benefit consumers and marketers by aiding in the effective selection and purchase of product promotions in pharmacies in order to improve the promotional process and the consumer process. This research enriches current literature by examining the long-term effects and the psychological factors associated with the sales promotions in the chain pharmacies, building on.[2,5] Additionally, it enhances the AIDA model by incorporating variables that increase its ability to explain the relationship between promotional mix and consumer purchasing behavior. The insights from this analysis are valuable for pharmacy managers and marketers, enabling them to design effective promotional strategies to enhance market competitiveness through consumer psychology. Furthermore, this research provides implications for future research on the characteristics of sales promotions in the pharmaceutical industry, suggesting exploration of other factors affecting sales promotions in the healthcare industry and developing a theoretical model for these industries. This work can significantly improve understanding of consumer behavior in this important industry, aiding both future academic analysis and practical marketing efforts.

CONCLUSION

This present study provides an analysis of several forms of priming employed in the use of sales promotions in the pharmaceutical product industry, within the specific context of pharmacies. This research contributes to current knowledge of the use of sales promotions with reference to the effects of discounted prices, point-of-purchase communications, and free samples in the pharmaceutical industry. It also goes beyond analyses of the semantic regularities of texts, which are common in previously conducted research, to analyze the cumulative effects of such strategies. The results of this study give a clear signal that this Increasing Consumer Engagement: AIDA model is fit to be used in the analysis of consumer engagement. Promotional activity demonstrates knowledge of the stages that lead consumers to be aware of a product and encourages them to act. This research builds on the theoretical framework used in the current literature by introducing product awareness as an important aspect of the customer decision-making process.

Limitations

However, there are particular limitations to this study that need to be acknowledged. The sample selection is where Jordan is the only focus, with no cultural influence intended on consumer behavior, but this may limit the generalizability of the results. Besides, the application of convenience sampling may not have included all and sundry from the target population and therefore limited the generalization of the findings to other populations. Further, it should be understood that we have analyzed only three promotional approaches in detail.

Future Research

Future research should attempt to expand the study of markets by increasing their geographical scope. Cross-cultural studies could provide important insights into the role of culture in the success of sales promotions. By combining other promotional techniques, such as customer reward programs and other technological tools, researchers can gain improved insights into purchase behavior in new pharmacies. A comparative assessment could also examine the effects of various promotional items on consumer patronage and brand predispositions in the future.

The Practical Implications for Professionals

Pharmacy managers and marketers will find these findings

beneficial for effective implementation. Discount promotions can encourage price-sensitive customers to visit business premises, thereby increasing foot traffic. A new industrial product should minimize consumer concern and enhance trial factors, customer retention, and market share expansion. Pharmacy professionals should then consider the following promotional strategies with a view to modifying them to fit the needs of their customers. Knowledge of the consequences of this research allows for the creation of more effective marketing strategies reflecting consumer characteristics that would improve the functioning of companies in the highly competitive pharmaceutical industry.

AUTHORS' CONTRIBUTION

Jassim Ahmad Al-Gasawneh contributed to study design, project administration, methodology, investigation, critical revising and editing of the original draft.

Abdullah A.M AlSokkar contributed to study design, methodology, investigation, and review and editing of the final manuscript.

Ahmed Alamro contributed to project administration, methodology, and reviewing and editing of the final manuscript.

Mohammed Binkhamis contributed to study methodology, investigation, critical revising and editing of the original draft.

Tahreer Abu Hmeidan contributed project administration, methodology, investigation, and reviewing and editing of the final manuscript.

Moatasem Al-Dabbas contributed project administration, methodology, investigation, and reviewing and editing of the final manuscript.

CONFLICT OF INTEREST

The authors have no association or financial involvement (i.e. consultancies/advisory board, stock ownerships/options, equity interest, patents received or pending, royalties/ honorary) with any organization or commercial entity having a financial interest in or financial conflict with the subject matter or research presented in the manuscript.

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