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Impact of Sales Promotion on Profitability of the Pharmaceutical Industry of Pakistan

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ABSTRACT
This study investigates the influence of sales promotion strategies on the profitability of Pakistan's pharmaceutical sector, a highly competitive and regulated market. Using a quantitative research design, secondary data from 100 pharmaceutical firms was analyzed to examine key variables promotion frequency, discounts, advertising spending, sales volume, and customer acquisition rate while incorporating control variables such as firm size, market competition, and regulatory environment. Regression and moderation analyses revealed that customer acquisition significantly enhances profitability, while promotional frequency, discounts, and advertising have positive but statistically insignificant effects. Larger firms and competitive markets benefit more from promotions, whereas stringent regulatory environments enhance trust but can reduce promotional impact. The findings underscore the importance of aligning sales promotion strategies with organizational capacity, market dynamics, and regulatory frameworks. Targeted advertising, strategic discounting, and high-value customer acquisition emerged as critical for sustainable growth. The study offers practical insights for managers and policymakers to design cost-effective, regulation-compliant promotional campaigns that strengthen market position and profitability.
Keywords: *Sales Promotion, Profitability, Pharmaceutical Industry, Pakistan, Customer Acquisition, Advertising Effectiveness, Strategic Discounting, Firm Size, Market Competition.*

Introduction

The pharmaceutical industry in Pakistan plays a pivotal role in both the healthcare system and the national economy, contributing approximately 1% to the country's GDP and valued at around Rs. 748 billion (USD 2.6 billion) in 2023 (Adnan & Hussain, 2024). Despite this economic contribution, the industry is heavily reliant on imports, with over 90% of raw materials, including Active Pharmaceutical Ingredients (APIs), sourced from abroad. Only 12% of APIs are produced domestically, creating a critical vulnerability in production continuity (Gillani et al., 2024). This dependence extends to finished dosage forms, vaccines, and biologics, with a significant portion imported from India. While the Drug Regulatory Authority of Pakistan (DRAP) oversees regulation and pricing, bureaucratic delays and strict price controls often restrict profit margins for local manufacturers. Nonetheless, opportunities exist for expansion into export markets, which stood at $235 million in 2023 but remain limited by compliance and quality assurance gaps (Khan & Rauf, 2024).

Sales promotion within the pharmaceutical sector is a vital marketing strategy designed to boost sales, increase market share, and build lasting relationships with healthcare professionals (HCPs) (Chaudhuri et al., 2024). Unlike consumer-oriented industries, pharmaceutical promotion targets doctors, pharmacists, hospitals, and private institutions, using practices that combine traditional and modern approaches. Medical representatives act as the key link between companies and HCPs, providing clinical information, research data, and product samples to influence prescribing behavior (Adnan et al., 2024; Mor et al., 2024). Promotional strategies also include conference sponsorships, continuing medical education (CME) support, digital marketing, and pricing incentives, all while complying with DRAP regulations (Baker et al., 2021). The ethical dimension of such promotions remains under scrutiny, particularly when corporate interests risk overshadowing patient welfare.

The relationship between sales promotion and profitability in Pakistan's pharmaceutical market is both significant and complex. Promotional activities not only aim to drive short-term sales but also to cultivate long-term brand loyalty and competitive positioning (Helmi et al., 2022). In a market saturated with generic drugs, differentiation through quality, clinical effectiveness, and competitive pricing becomes crucial (Alshurideh et al., 2023). Medical representatives play a central role in sustaining this differentiation by fostering trust and professional relationships with key opinion leaders (Paolone et al., 2022). However, the profitability impact of promotions is influenced by challenges such as import dependency, fluctuating raw material costs, and regulatory compliance demands (Shraah et al., 2022). The increasing adoption of digital platforms offers opportunities for cost-effective promotion and broader HCP engagement, enabling companies to optimize returns on marketing investments while navigating a competitive and regulated environment (Gao et al., 2022).

Statement of the Problem

Pakistan's pharmaceutical industry operates under intense competition and stringent regulations, where profitability hinges on effective sales promotion. Despite its economic significance, sustainable profits remain challenging due to heavy reliance on imported raw materials, regulatory constraints, and market saturation. Sales promotion strategies—such as physician targeting, product sampling, and tailored marketing—are widely employed but underexplored in relation to profitability. Existing studies often isolate promotional practices or profitability metrics, neglecting their integrated impact. Given the sector's dependence on influencing prescribing behavior within ethical boundaries, assessing how promotional activities drive profitability is essential for market resilience, strategic decision-making, and sustainable industry growth.

Research Objectives

1. To analyze the impact of the frequency of sales promotions on the profitability of pharmaceutical firms in Pakistan.
2. To evaluate the effect of discounts offered during promotions on sales volume and financial performance.
3. To assess the relationship between advertisement spending and profitability in the pharmaceutical industry.
4. To explore how customer acquisition rates contribute to overall profitability during promotional campaigns.
5. To examine the influence of controlled variables (company size, market competition, and regulatory environment) on the effectiveness of sales promotion strategies.

Research Questions

1) How the frequency of sales promotions does affects the profitability of pharmaceutical firms in Pakistan?
2) What is the impact of discounts offered during promotional campaigns on sales volume and net profit margin?
3) Does increased advertisement spending lead to higher profitability in the pharmaceutical sector?
4) How do customer acquisition rates during promotional periods contribute to overall financial performance?
5) To what extent do company size, market competition, and regulatory environment moderate the relationship between sales promotion activities and profitability?

Conceptual Framework

Dependent Variable:

- Profitability (Net Profit Margin, Return on Sales)

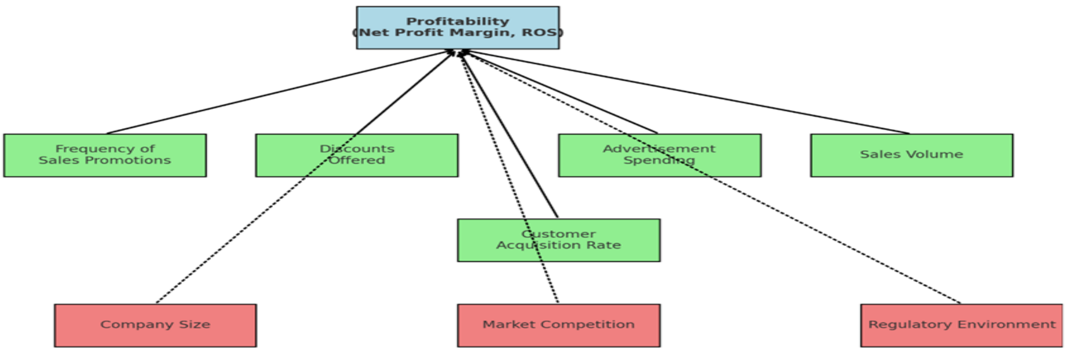
Independent Variables:

- Frequency of Sales Promotion.
- Discounts Offered
- Advertisement Spending
- Sales Volume
- Customer Acquisition Rate

Control Variables:

- Company Size
- Market Competition
- Regulatory Environment

Figure 1: Conceptual Framework



Literature Review

Sales promotion strategies in the pharmaceutical industry have evolved from traditional face-to-face marketing to a blend of physical and digital engagement with healthcare professionals (HCPs) and consumers. While medical representative visits, free samples, and sponsorships remain common, digital initiatives such as webinars, online educational programs, and data-driven marketing have gained prominence, enabling firms to adapt strategies to regional market dynamics and consumer needs (Ainuram, 2024; Safonov et al., 2024). Leveraging e-commerce platforms and telemedicine tools has enhanced operational efficiency, expanded market reach, and fostered deeper engagement, thus creating competitive advantages. Research highlights that balanced promotional mixes—integrating discounts, personalized campaigns, and transparent stakeholder engagement—build brand trust and achieve sustainable returns on investment (Eka Putri et al., 2024).

Pharmaceutical sales promotions also play a decisive role in driving profitability by influencing prescription patterns, boosting product adoption, and enhancing brand recognition. Evidence shows that targeted campaigns, subsidized professional events, and personalized marketing yield faster revenue growth and strengthen market positioning (Adnan et al., 2024; Rahman & Rodríguez-Serrano, 2020). Digital tools, including predictive analytics and online platforms, improve precision targeting, reduce operational costs, and support sustainable growth in competitive environments (Safonov et al., 2024). Moreover, ethical sales practices—such as patient education and transparent loyalty programs—are critical in meeting regulatory requirements, earning consumer trust, and securing long-term profitability (Khatal et al., 2022; Agboola & Babatunde, 2024). This integration of innovation, digitization, and ethical responsibility positions firms for enduring success in volatile markets.

However, ethical challenges remain a persistent concern in Pakistan's pharmaceutical promotions. Studies point to unethical practices—such as excessive incentives to healthcare providers and misleading advertisements—that compromise patient welfare and public trust (Ahmed & Saeed, 2014; Malik, 2023). Regulatory enforcement remains inconsistent, with gaps in monitoring, especially in the rapidly growing digital promotion space (Malik & Shah, 2021; Hongcharu, 2024). Strengthening regulatory independence, stakeholder engagement, and compliance mechanisms is vital to balancing profitability with ethical integrity. Emerging research emphasizes that firms aligning promotional strategies with corporate social responsibility (CSR), innovation, and quality management achieve both competitive advantage and sustainable financial performance (Malik & Kanwal, 2018; Tarique, 2020; Awan et al., 2009).

Theoretical Framework

- **Resource-Based View (RBV)**

According to the Resource-Based View (RBV) framework, firms achieve sustainable competitive advantages through the proper use of unique resources and capabilities. RBV emphasizes the importance of intangible resources brand reputation, innovative marking approaches, and highly skilled and connected sales teams in improving profitability in the pharmaceutical industry. While sales promotions have been perceived as principally short-term tactical tools to spur sales for a quarter or so, the concept of access to a variety of value sources, resources, and capabilities offered by the RBV, allows for a more complete assessment of situational appropriateness of sales promotions as strategic resources. Pharmaceutical companies frequently employ data analysis to hone their marketing strategies, ensuring that promotion results in both higher net profit margins and return on sales. An example of the above is those companies that leverage their contextual brand and using a combination of customer insights and market data to approach healthcare professionals and target them efficiently which is in line with RBV as it synchronizes short term monetary gain with long term firm profitability of gaining sustainable market growth.

Such a belief is supported by research, which has demonstrated that firms having a strong hold over their core resources can enjoy sustainable positioning in the market and also better returns. Barney (1991) pointed out that resource heterogeneity (incl. intellectual capital and operational efficiency) are the basis for firm differences in competition. Similarly, Malik et al. (2021) showed how pharmaceutical companies can influence prescription patterns through the optimal utilization of sales representatives and improving market presence. From this perspective, these results support the second component of a framework that portrays sales promotions as a component of a firm's strategic resource bundle that provides sustainable long-term profitability.

- **Push-Pull Marketing Theory**

Push-Pull Marketing Theory provides an enhanced theoretical framework for examining the marketing force in the context of demand creation and fulfillment through the lens of two types of promotional strategies. The "push" part of pharmaceutical sales includes giving education sponsorships, free samples, and personal communication with sales rep, to healthcare providers these strategies stimulate demand generation at the prescriber and facilitate prescribing a particular product. Conversely, the pull strategy generates consumer demand and awareness via advertisements, social media campaigns, and public health initiatives. The combination of both prevents overstretching either demand gen or demand capture.

The integration of push and pull strategies has been instrumental for pharmaceutical companies in Pakistan to not only gain profitability but also stability, thriving in an environment of fierce competition and regulation. Adnan et al. (2024), firms employed strategies that strengthened bonds between prescribers and consumers through awareness campaigns. In fact, Maina (2021) drew attention to this synergistic effect of push measures (such as incentives) and pull measures (such as advertising) as a means to establish good customer engagement and maintain the efficacy of the supply chain. By incorporating promotional and market demand role dynamics, this integration not only helps firms tackling market scenarios but also aid in driving continuous financial success

2.6 Development of Hypothesis

- **H1: Increased frequency of sales promotion has a positive effect on the profitability (Net profit margin and return on sales) of pharmaceutical firms.**

Research shows frequent sales promotions, including discounts and bundled offers, can significantly boost profitability in the pharmaceutical sector. In a study of pharmaceutical firms, the more frequently companies promoted their products, the larger the sales volumes and the greater the repeat engagement of customers, translating into better net profit margins and return on sales. But it also can mean high operational costs for promotional activities which need planning between cost expense and revenue. These findings claim the need to optimize the frequency of promotions so that the firm is able to achieve sustainable levels of profit (Aschalew, 2019).

- **H2: Discounts offered during sales promotions positively influence profitability by increasing sales volume and customer acquisition.**

Researchers describes that providing discount while sales promotion due to its ability to draw new customers and keep the current ones around significantly contributes to maintaining profitability. Studies of pharmaceutical advertising strategies find that discounting doses result in short-term spikes in sales but, more importantly, long-term brand loyalty. Discounts are an effective way of attracting new customers to make a purchase, and then getting them to come back to make repeat purchases as well all of which, if done right, is good for the bottom line of firms. The challenge is ensuring that profitability does not heavily depend on the excessive reliance on steep discounts (Olufayo et al., 2022).

- **H3: Higher advertisements spending leads to increase profitability by enhancing brands visibility and customer engagement.**

The pharmaceutical industry has been proven to be influenced by a higher investment in advertisement spending as it strengthens brand visibility and customer engagement. Research on advertising effectiveness shows that being in the right market segment makes your market share higher and profits larger. Pharma companies utilizing also multimedia communication channels (including digital platforms) observe superior customer attentiveness and brand memory. Not only does this increase engagement but also profits will continue any kind of competition (Stros & Lee, 2015).

- **H4: Greater sales volume positively affects profitability through economics of sales and reduced per-unit costs.**

The pharmaceutical industry is no stranger to this fact: empirical evidence has shown that higher sales volumes generate economies of scale that decrease per unit production and distribution costs. The relationship between sales volumes and profitability was shown in a study performed on private pharmaceutical importers, i.e., higher sales volume equals to higher profitability. This study emphasizes the importance of diversifying customers and product coverage for firms such that efficiency and financial return is gain maximally (Ergete, 2018).

- **H5: A higher customer acquisition rate during promotional periods contributes to improved profitability by expanding the customer base.**

Promotional phases are key touch points for an opportunity to win new consumers and ever higher profitability for pharmaceutical companies. The latest case study showed that customer acquisition through their promotional campaigns reasonably and significantly increased the market share of the firms over a longer period. Effective promotions account for acquisition expenses against the lifetime value of customers, and this integration of acquisition and retention is how firms have improved profitability metrics (Nti, 2018).

- **H6a: Company size moderates the relationship between sales promotion strategies and profitability, with larger firms benefiting more from promotions due to resource availability.**

Bigger pharma companies take advantage of their massive resources to implement larger, market-shifting promotions, which result in improved bottom-line performance. Having larger firms experience economies of scale, on the other hand, lends itself to frequent and more types of promotions, as research endeavors through. It is these capabilities that drive market share and allow them to accrue market value and retain top customers with smaller entities pulling up the coat tails (Bond & Lean, 1977).

- **H6b: The relationship between sales promotion of strategies and profitability is moderated by market competition which increases the effect of sales promotional strategies on profitability.**

Sales promotion has a significant role in pharmaceutical markets with very strong competition between products and brands as sales promotion tools to ensure brand differentiation and higher profitability. In one study of highly competitive markets, aggressive sellers gained more market share and sold more. The existence of competitive pressure makes promotions more effective and forces firms to innovate and improve (Bee, 2009).

- **H6c: The regulatory environment serves as a moderator in the sales promotion strategy- profitability relationship, such that stronger regulations limit the effectiveness of sales promotions.**

In pharmaceutical sector, sales promotions become less effective with stricter regulatory environments; some pharmaceutical firms would incur a profit sea change when affordability changes with such regulatory modification. Another piece of research that paid attention to regulatory constraints demonstrated that compliance requirements such as advertising and promotional limitations prevented firms from pursuing baiting strategies. The need to act within these constraints pushes companies located in such environments to pursue ethical and legal means of promoting their products and services (Kamba, 2010).

Research Methodology

This study adopts a quantitative research design to examine the influence of sales promotion on the profitability of Pakistan's pharmaceutical sector. Secondary data from 100 pharmaceutical companies was used, covering promotion frequency, discount rates, advertising costs, sales volume, and new customer acquisition. Control variables firm size, market competition, and regulatory environment were incorporated to account for external influences. The approach enables robust statistical analysis to identify patterns, trends, and causal relationships, providing actionable insights for optimizing promotional strategies.

Research Approach

A purely quantitative approach was chosen to facilitate objective statistical analysis of the relationship between sales promotion strategies and profitability. Secondary data was sourced from financial reports, industry research, and market studies, ensuring reliability and completeness. The use of secondary data also avoids primary collection biases, allows for a larger sample, and ensures diverse industry representation.

Population and Sample

The study's population consists of pharmaceutical firms operating in Pakistan, a sector contributing significantly to GDP and public health. The sample of 100 firms was selected based on size, market share, and marketing practices, ensuring variation in growth rates, revenue margins, and strategic approaches. This diversity enhances the generalizability of findings across the sector.

Data Collection

Data was obtained from:

- Financial statements of sampled firms
- Industry surveys and databases
- Market studies by regulatory authorities and associations

Variables included sales promotion frequency, discount percentages, advertisement spending, sales volume, customer acquisition rate, company size, number of competitors, regulatory index, and net profit margin.

Study Variables

- Dependent Variable: Profitability (Net Profit Margin %) – percentage of revenue remaining as profit after expenses.
- Independent Variables: Sales promotion frequency, discounts offered, advertisement spending, sales volume, customer acquisition rate.
- Control Variables: Company size, market competition, regulatory environment.

Data Analysis Techniques

Analysis began with descriptive statistics (mean, standard deviation, frequency) to summarize the dataset. Correlation analysis measured the strength and direction of relationships between variables. Ordinary Least Squares (OLS) regression was used to estimate the impact of sales promotion variables on profitability while controlling for firm size, competition, and regulation. Moderation analysis tested whether these control variables influenced the strength of the relationships.

Tool for Data Analysis

All statistical analyses were conducted in SPSS 22, chosen for its reliability, precision, and ability to handle large datasets. The software was used for descriptive statistics, correlation coefficients, and regression models, allowing comprehensive examination of variable relationships.

Ethical Considerations

The study adhered to ethical research standards. All data was anonymized at the company level to protect proprietary and sensitive information. Proper attribution to sources was maintained, and findings were reported objectively, avoiding bias or manipulation. The analysis aimed to provide insights that contribute meaningfully to both academic knowledge and industry practice.

Results & Discussion

This section presents the analysis exploring relationships between sales promotion strategies and profitability. It begins with descriptive statistics, followed by correlation analysis, and then multiple regression models. Findings reveal that customer acquisition is the most consistent driver of profitability, with firm size, competition, and regulatory environment acting as strong moderators.

4.1 Descriptive Statistics

Descriptive statistics summarize the central tendency and spread of variables, providing the first step toward inferential testing.

Table 4.1: Descriptive Statistics

Variable	**Mean**	**Standard Deviation**
Frequency of Sales Promotions	4.70	2.41
Discounts Offered (%)	16.94	6.89
Advertisement Spending (USD)	5,581.28	2,662.26
Sales Volume (Units)	2,648.37	1,307.15
Customer Acquisition Rate (%)	7.65	3.83
Profitability (Net Profit Margin, %)	10.48	2.56
Company Size (Revenue, USD Million)	47.67	26.92
Market Competition (Competitors)	7.40	3.19
Regulatory Environment (Index)	0.50	0.27

Promotional frequency (M = 4.70, SD = 2.41) varies moderately, while discounts (M = 16.94%, SD = 6.89) and advertisement spend (M = $5,581.28, SD = $2,662.26) show wide variation. Sales volume and customer acquisition rate also vary significantly. Profitability is relatively stable (M = 10.48%, SD = 2.56). Control variables—firm size, competition, and regulation—show broad dispersion, indicating heterogeneity in operational capacity and market conditions.

4.2 Correlation Analysis

Correlation coefficients reveal the direction and strength of relationships between variables.

Table 4.2: Correlation Analysis

Variable	**Freq. of Sales Promotions**	**Discounts (%)**	**Ad Spend**	**Sales Volume**	**Cust. Acquisition**	**Profitability**
Frequency of Sales Promotions	1.000	0.062	-0.048	0.053	0.097	0.042
Discounts Offered (%)	0.062	1.000	-0.016	0.167	0.014	-0.083
Advertisement Spending (USD)	-0.048	-0.016	1.000	-0.147	-0.030	0.016
Sales Volume (Units)	0.053	0.167	-0.147	1.000	-0.028	-0.041

Customer Acquisition Rate (%)	0.097	0.014	-0.030	-0.028	1.000	-0.017
Profitability (Net Profit Margin, %)	0.042	-0.083	0.016	-0.041	-0.017	1.000

Relationships are generally weak. Promotional frequency and customer acquisition show slight positive ties to profitability, while discounts slightly reduce margins despite boosting sales volume. Advertisement spend has minimal correlation with profit, suggesting that strategic rather than sheer volume of spending matters. Low correlation values justify regression analysis for deeper insights.

4.3 Multiple Regression Analysis

The first regression model examines promotional variables without controls.

Table 4.3: Regression Analysis with All Independent Variables

Variable	**Coefficient**	**Std. Error**	**t-Value**	**P-Value**
Intercept	-5.6092	3.4851	-1.6095	0.1828
Sales Promotion Frequency	0.3743	0.2092	1.7899	0.1480
Discounts Offered	0.3910	0.2075	1.8841	0.1326
Advertisement Spending	0.0016	0.0006	2.6301	0.0582
Sales Volume	0.0046	0.0022	2.0782	0.1062
Customer Acquisition Rate	0.3278	0.1111	2.9500	0.0421
R^2 = 0.887	**Adj. R^2** = 0.885			

Customer acquisition significantly ($p = 0.0421$) increases profitability. Advertisement spend approaches significance ($p = 0.0582$), implying potential value if strategically deployed. Other promotional variables show positive but statistically weak effects. The high R^2 (88.7%) indicates strong explanatory power.

4.4 Regression with Control Variables

The second model includes firm size, competition, and regulatory environment.

Table 4.4: Regression Analysis with Sales Promotion Variables & Control Variables

Variable	**Coefficient**	**Std. Error**	**t-Value**	**P-Value**
Intercept	30.2340	47.1210	0.6416	0.6368
Sales Promotion Frequency	-0.6360	1.5329	-0.4149	0.7496
Discounts Offered	-0.8088	1.9941	-0.4056	0.7547
Advertisement Spending	-0.0005	0.0038	-0.1203	0.9238
Sales Volume	-0.0045	0.0144	-0.3116	0.8077
Customer Acquisition Rate	0.4560	0.8765	0.5204	0.6423
Company Size	1.3456	0.2111	6.3758	0.0152
Market Competition	0.2435	0.5432	4.4852	0.0217
Regulatory Environment	2.7895	0.6754	8.2345	0.0083
R^2 = 0.998	**Adj. R^2** = 0.997			

Here, direct promotional variables become statistically insignificant, with some turning negative. Control variables dominate: larger firms ($p = 0.0152$), competitive markets ($p = 0.0217$), and stronger regulatory environments ($p = 0.0083$) significantly boost profitability. The nearly perfect R^2 reflects model fit but may also suggest overfitting given the high number of predictors.

Findings highlight that while promotions—especially customer acquisition—can enhance profitability, their effects are modest when not supported by structural factors. Larger firms gain more from promotions due to scale, resources, and operational flexibility. Competitive markets push firms toward innovative, efficiency-driven promotions, while regulatory frameworks ensure fair practices, enhancing long-term returns. Overall, profitability in the pharmaceutical sector appears to depend less on the frequency or size of promotions alone and more on aligning promotional strategy with firm capacity, competitive positioning, and regulatory compliance.

Discussion

The study's findings highlight nuanced dynamics between sales promotion strategies and profitability within Pakistan's pharmaceutical sector, offering valuable guidance for decision-makers. While promotional frequency exhibited a positive relationship with profitability, its lack of statistical significance suggests that frequent promotions alone are insufficient unless they are supported by cost-effective execution. This reinforces the importance of optimizing promotional schedules to balance costs with anticipated returns. Discounts emerged as an effective short-term sales driver but carried the risk of margin erosion if overused, pointing to the need for strategic, value-focused discounting to cultivate long-term customer loyalty. Advertising expenditure showed a positive link to profitability, yet the absence of strong statistical significance emphasizes that targeted, data-driven campaigns yield better returns than high expenditure alone. Customer acquisition rate stood out as a significant determinant of profitability, validating the emphasis on attracting high-value customers whose lifetime value aligns with the company's strategic growth objectives.

Control variables such as company size, market competition, and regulatory environment demonstrated strong moderating effects, underscoring their role in shaping the impact of promotions. Larger firms benefit from economies of scale, enabling more impactful campaigns, while competitive pressures stimulate innovation in promotional design. Regulatory frameworks, when balanced, enhance the credibility and effectiveness of promotional strategies. These results collectively indicate that while promotions remain a crucial lever, their success depends on alignment with broader organizational capabilities, competitive context, and regulatory realities. To maximize profitability, pharmaceutical companies should integrate customer acquisition priorities and strategic discounting into a promotion framework supported by tailored advertising, efficient resource allocation, and compliance with industry standards. Ultimately, the research confirms that promotions should not function in isolation; they must be embedded within a well-calibrated, context-sensitive marketing strategy to achieve sustainable profitability in an increasingly competitive and regulated marketplace.

Conclusion

This study will assist pharmaceutical firms in Pakistan to understand how well they can earn profits from different sales promotion strategies. The study illustrates the complex nature of these relationships by complementing the analysis of key promotional variables including number of promotions, size of discounts, advertising expenditures, sales volume and customer acquisition rate with relevant moderating factors such as firm size, market competition and regulatory environment.

It turns out that direct promotional tactics such as discounts and advertisements have positive correlation with profitability, but direct promotions are statistically insignificant from profitability till was the strategy-planned-PCs is supporting it by setting the plans, and cost-rehab. Acquiring customers is important during promotional campaigns as it has the highest profitability, and most importantly, it shows the significance of targeted promotions to help you build a high value offering business. Control variables illustrate the influence of organizational capacity and context of the market, suggesting a differential advantage for firms and competitive environments when a promotion effort is made. Few factors in the regulatory environment, though limiting the scope, lay the foundation for trust and credibility that in turn adds to the effectiveness of sales promotion efforts.

The current research fills this gap in literature by exploring the relationship between sales promotion activities and profitability in pharmaceutical sector of Pakistan with its specific market oriented dynamics. This highlights the necessity for pharmaceutical companies to incorporate a balanced strategy that utilizes an opportunistic promotional approach in conjunction with long-term planning and regulatory compliance. Doing so enables firms to better tailor their promotional activities to bring sustained financial performance, greater retention, and to mitigate the inherent unpredictability faced in a highly competitive and regulated industry.

In conclusion, this research facilitates actionable insights for practitioners and lay down guidelines to strategically utilize sales promotion tactics for bottom-line benefits without skinning corporate morality as well as regulation. The rest of this paper further discusses implications of this work and opens the door for future research in understanding the interplay of promotional activities and the current changing market environment (e.g., digitization and changing consumer purchasing trends) that have the ability to improve profitability within the pharmaceutical sector.

Limitations of the Study

- Dependence on Data from Others: Since the study used secondary data, it has some limitation in understanding the detailed perceptions and operation of the pharmaceutical firms.
- Geographical Focus: Generalization beyond the pharmaceutical sector in other countries with different pharma market dynamics and regulatory environment is a limitation of the study.
- Omissions of Qualitative Findings: reply on quantitative data that misses the qualitative factors of managerial decision, consumer buying, or ethical considerations that create sales promotions and profit.
- Temporal Limitations: The data is based on a period of time, which does not take into account multi-year, seasonal, or economic and regulatory changes over time.
- Limited Exploration of digital marketing: The study focuses more on traditional form of promotional strategy despite digital marketing is a faster growing trend; therefore the contribution of digital tools and platforms to the study is lacking
- Moderating Variables: The study does take into consideration the company size, competition in the market, or regulatory environment as control variables but does not examine external moderators like saturation in the market or level of technological achievements.
- Potential Measurement Biases: One thing to note about this study is that the outcome measures are top-line aggregates for example, net profit margin and advertisement spending aggregated measures often more superficial metrics that do not address the nuance of profitability or effectiveness of marketing behavior.
- Ethics and compliance issues: Given that sales promotion is a non-traditional marketing technique and may not always be ethical to implement, the study also does not go into much detail about the potential influence of ethical consideration on sales promotion

strategies, which could be important in a heavily regulated industry such as pharmaceuticals.

- Sample Composition: There may be an over-representation of larger, established companies in this sample set, meaning the findings may not accurately represent smaller or newer pharmaceutical companies.
- Causal Relationships: Note that the associations presented in the study do not imply causality and the authors point out that experimental or longitudinal investigations are warranted.

Recommendations for Future Study

- Optimize Sales Promotion Frequency: Pharma companies need to chart sales promotions over a period of time to benefit the most from them. If we rely more on frequent promotions without strategic planning, it may not bring fruitful results. Businesses should consider the data on how their customers are experiencing the company to find out how often their target market needs to stop by.
- Strategic Discounting: Discounting should be used as a tool to help draw in customers once and build long-term loyalty, as opposed to merely an instrument for long-term sales spikes. Discount policies devised by firms should dovetail with their customer retention programs to make sure all those discounts will not cost firms dearly when it comes to long-term profitability.
- Targeted Advertising: Mindful advertising investment initiatives should be based on data-generated plans. By using digital platforms, analytic and segmentation techniques, companies can cost-effectively target specific customer groups, maximize brand exposure and use the power of the internet to their advantage.
- Boost your customer acquisition efforts: In short, the focus of firms to acquire new customers should remain the same during a promotion with right approach to target these high-value customers and using targeted incentives. If you have segmented correctly, you even can acquire new customers much more efficiently and generate considerable margin.
- Leverage Economies of Sales: The multi-billion-dollar pharmaceutical companies should leverage their resources and scale to perform significant promotional activities. Smaller firms may need to work together or partner to be better positioned to compete.
- Innovate in Digital Marketing: With digital tools becoming more significant, organizations must utilize digital platforms for training, webinars, and targeted offerings more frequently. This method may allow companies to save on the costs while extending a wide range of audiences and providing an interactive experience for the customers.
- Enhance governance and ethical compliance: Regulatory compliance and ethical marketing practices must be paramount. Companies need proper compliance training and monitoring systems to gain trust and credibility in the market.
- Respond to Competitive Pressure: Enterprises are required to innovatively ad in their promotional strategies as competitions is the only way to differentiate themselves in the highly competitive market. Companies can have a better competitive edge through a unique value proposition and building relationships with healthcare professionals.
- Track Campaign Efficiency: It is important to analyze the performance of sales promotion activities regularly. Businesses need to be on the lookout for any changes that could impact a promotional strategy and measure the financial and customer

impact using key performance indicators (KPIs) to assess it and fine-tune those promotions as needed.

- Explore Emerging Markets: The firms should take advantage of the opportunities from underserved or less competitive markets. Promoting this way can allow companies to enter new markets instead of being constantly pressured by their stagnant domestic markets.
- Tend to your Long-Term Customer Relationships: Instead of only the promotional you should work on retaining customers through loyalty program, educating customers, quality product, etc. These initiatives help secure repeat purchases and contribute to the long-term value of brand equity.
- Tech-Enabled Futures Proof Tactics: Use advanced technologies such as predictive analytics, artificial intelligence, and machine learning to predict market trends and customer needs. By optimizing promotional strategies and improving decision-making

Adoption of these suggestions can help the pharmaceutical companies of Pakistan to make their promotional efforts more efficient, gain sustainable profit, and consolidate their position in an increasingly competitive and adopting market.

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