Behavioral Biases in Marketing: Exploring the Decoy Effect in Consumer Behavior

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Abstract: Consumer decision-making is often influenced by psychological factors rather than purely logical reasoning. Among the various behavioral biases that affect purchasing decisions, the decoy effect has gained considerable attention from researchers and marketing practitioners. The decoy effect occurs when an additional alternative is introduced into a choice set with the intention of making another option appear more attractive. Although the decoy option is rarely selected, its presence can significantly influence consumers' preferences and ultimately affect their purchasing decisions. Businesses across different industries, including retail, food, finance, and online commerce, increasingly use this strategy to improve product positioning and increase sales.

The present study explores the role of the decoy effect within the broader context of behavioral biases in marketing. A Systematic Literature Review (SLR) was conducted to examine recent research published between 2018 and 2024. Relevant studies were collected from recognized academic databases, including Scopus, Google Scholar, Springer, and Taylor & Francis. After applying predefined inclusion and exclusion criteria, nine high-quality studies were selected for detailed analysis. The review focuses on understanding how the decoy effect influences consumer decision-making, how it interacts with other behavioral biases, and what ethical concerns arise from its practical application.

The findings indicate that the decoy effect consistently influences consumer preferences across multiple market settings. It has been successfully applied in retail pricing, food purchasing, online recommendation systems, and financial decision-making. The review also suggests that the effectiveness of the decoy effect depends on several factors, including consumer involvement, product characteristics, pricing strategy, and the complexity of available choices. At the same time, the increasing use of decoy-based marketing strategies raises important ethical questions regarding transparency, fairness, and consumer autonomy.

This study contributes to the existing literature by bringing together recent empirical evidence on the decoy effect and discussing its practical as well as ethical implications. The findings may assist researchers, marketers, and business managers in designing consumer-oriented marketing strategies while maintaining ethical standards and long-term customer trust.

Keywords: Decoy Effect, Behavioral Biases, Consumer Behavior, Consumer Decision-Making, Marketing Strategy, Pricing Strategy, Systematic Literature Review.

I. INTRODUCTION

One of the most crucial areas of marketing research has always been consumer behavior since it enables companies to create efficient products, pricing schemes, advertising campaigns, and distribution networks. Conventional economic theories make the assumption that consumers are logical people who carefully consider all the information at their disposal before choosing the course of action that will benefit them the most. This viewpoint holds that purchasing decisions should be logical, consistent, and objective. However, research in consumer psychology and behavioral economics has demonstrated that this ideal process is rarely followed in real-world decision-making. Due to a lack of information, time constraints, emotional influence, and cognitive limitations, consumers frequently make decisions. People often rely on heuristics, or mental shortcuts, rather than carefully weighing all of the options. Although these shortcuts make complicated decisions easier to understand, they may also cause consumers to make systematic mistakes known as behavioral biases. Customers' perceptions of prices, assessments of product quality, comparisons of options, and reactions to marketing communications are all influenced by behavioral biases. Anchoring bias, framing effect, confirmation bias, availability bias, status quo bias, loss aversion, and the decoy effect are just a few of the biases that researchers have found frequently influence consumer behavior. These biases show that consumer preferences are frequently influenced more by the presentation of options than by the true worth of goods or services. Among these behavioral biases, the decoy effect has become one of the most widely discussed concepts in marketing and consumer research.

The decoy effect, also referred to as the asymmetric dominance effect, happens when marketers present an extra option that is purposefully less appealing than one of the current options. The decoy itself is rarely selected by customers, but its existence alters how other options are assessed.

Customers are therefore more likely to choose the option that the marketer wants to advertise. Pricing strategies are a frequently mentioned illustration of the decoy effect. Imagine a consumer having to decide between a ₹180 small coffee and a ₹300 large coffee. At first, a lot of customers might favor the less expensive choice. But when a medium-sized coffee, which costs ₹280, is added to the menu, the large coffee suddenly seems to be more affordable. The presence of the medium-sized coffee encourages many customers to choose the large coffee, despite the fact that relatively few buy it. Instead of offering true purchasing utility in this scenario, the medium-sized coffee serves as a decoy that alters the customer's perception of value. The growing significance of behavioral economics in contemporary marketing is reflected in the growing application of the decoy effect. Organizations are increasingly designing their pricing structures, product assortments, subscription plans, and online recommendation systems by taking into account how customers actually think and make decisions rather than depending only on conventional promotional activities. Behavioral principles are widely used by digital commerce platforms, supermarkets, restaurants, subscription-based businesses, and financial institutions to influence consumer choices and enhance business performance.

The application of the decoy effect has generated a great deal of controversy among researchers and marketing experts despite its useful advantages. Decoy tactics, according to supporters, make it easier for customers to compare options and make decisions. However, detractors contend that these tactics could deceive customers by subtly influencing their preferences without their knowledge. Businesses must strike a balance between commercial goals and transparency and fairness as consumer awareness of ethical marketing grows. Further research has shown that the decoy effect seldom functions on its own. Instead, it often interacts with other behavioral biases such as framing effects, anchoring, loss aversion, and status quo bias. These interactions make consumer decision-making even more complex and highlight the need for a comprehensive understanding of behavioral influences in marketing. As businesses increasingly rely on data-driven marketing and personalized recommendation systems, understanding these psychological mechanisms has become more important than ever.

Considering the growing academic interest in behavioral marketing, this study presents a systematic review of recent research on the decoy effect published between 2018 and 2024. By synthesizing findings from multiple empirical studies, the paper aims to provide a comprehensive understanding of how the decoy effect influences consumer behavior across different industries and market settings.

The specific objectives of this study are:

1. To examine how the decoy effect influences consumer decision-making across different marketing contexts.
2. To analyse the relationship between the decoy effect and other behavioural biases that affect consumer choice.
3. To evaluate the ethical implications associated with the use of decoy-based marketing strategies.
4. To identify future research opportunities that can contribute to a deeper understanding of behavioral biases in marketing.

The findings of this research study are expected to contribute to both managerial practices as well as academic research. From a managerial perspective, it provides insights that may help organisations design more effective pricing strategies, product portfolios, and marketing campaigns while maintaining consumer trust and ethical responsibility and from an academic perspective, the study consolidates recent evidence on one of the most influential behavioral biases in consumer decision-making.

2. Review of Literature

2.1 Behavioral Biases in Marketing

From the last few decades, Research in Marketing has eventually Shifted from the traditional belief that Consumers are Rational Decision-makers. Classical Economic Theories suggest that Consumers compare all the available options or alternatives, cost and benefits, and finally choose that option which maximize their satisfaction. However, practically observations and empirical research shows that consumer decision making follow any systematic process. Instead, buying behavior is commonly influenced by emotions, previous experiences, social influences, limited information’s and various psychological factors.

This understanding led to the emergence of behavioral economics, a field that combines insights from psychology and economics that explains how peoples actually make decisions. Rather than assuming perfect rationality, Behavioral economics accepts that consumers frequently rely on mental shortcuts, (which can be called as heuristics) for simplifying the complex decisions. Although these heuristics or shortcuts reduce the efforts need for decision making, they may also lead to biases or predictable errors.

Behavioural biases refer to recurring tendencies that cause people to make judgments that differ from objective or rational thinking. These biases shape the way consumers process information, compare different options, assess prices, and judge the quality of products. Because buying decisions are often made in situations where complete information is unavailable or uncertainty exists, marketers increasingly take these psychological influences into account when developing products, creating advertisements, setting prices, and planning promotional strategies.

Among the behavioural biases widely discussed in marketing research, anchoring bias, the framing effect, confirmation bias, availability bias, loss aversion, status quo bias, the scarcity effect, and the decoy effect have attracted significant attention. Each of these biases influences consumer behaviour in a distinct way. Collectively, however, they highlight that purchasing decisions are shaped not only by the characteristics of a product but also by the manner in which available options are presented to consumers.

Anchoring bias arises when consumers place excessive importance on the first piece of information they encounter, especially when it relates to price. For instance, if a shopper initially sees a product priced at ₹5,000, another similar product priced at ₹3,800 is likely to seem like a good bargain, even if its actual market value is considerably lower. To take advantage of this tendency, retailers often display higher reference prices or "original prices" to make the discounted price appear more attractive.

The framing effect influences consumer decisions by changing how information is presented rather than changing the information itself. A product advertised as "95% fat-free" often appears more attractive than one described as containing "5% fat," although both statements communicate identical information. Such framing influences perceptions without altering the product's objective characteristics.

Loss aversion is another key behavioural bias that significantly influences consumer decision-making. According to behavioural economics, people tend to feel the pain of a loss more strongly than the pleasure of an equivalent gain. As a result, marketers often frame promotional messages around what consumers might lose, rather than what they could gain. Tactics such as limited-time offers or low-stock alerts create a sense of urgency, motivating consumers to make purchase decisions more quickly. Another widely recognised behavioural tendency is the status quo bias, which refers to people's preference for sticking with their current choices instead of considering new alternatives. This bias is commonly observed in areas such as subscription services, insurance policies, and financial investments, where consumers often continue with their existing plans even when more beneficial options are available.

While each of these behavioral biases has its own characteristics, they rarely operate independently. Consumer decisions are usually influenced by multiple psychological mechanisms simultaneously. Understanding these interactions provides marketers with valuable insights into how purchasing behavior can be influenced in both traditional and digital marketplaces. Within the broader field of behavioral economics, the decoy effect has emerged as one of the most influential and widely studied phenomena. It demonstrates how the introduction of an additional option, even one that appears relatively unimportant, can substantially influence consumer preferences without altering the objective value of the existing alternatives.

2.2 The Decoy Effect: Concept and Theoretical Background

The decoy effect, also referred to as the asymmetric dominance effect, occurs when the introduction of an inferior alternative influence's consumers' preferences between two existing options. Although this additional option is deliberately designed to be less attractive and is rarely chosen, its presence makes one of the original alternatives appear more appealing, leading to a significant shift in consumer purchasing decisions.

The concept gained widespread recognition through the pioneering research of Huber, Payne, and Puto in the early 1980s. Their work challenged the traditional economic view that consumer preferences remain consistent regardless of the set of available choices. Instead, they showed that preferences are often formed during the decision-making process and can change when new alternatives are introduced. The decoy effect is considered a violation of the "Independence of Irrelevant Alternatives" principle in classical economics. According to traditional theory, adding an option that no rational consumer would choose should not affect the relative preference between the original alternatives. However, numerous behavioral studies have consistently shown that introducing an asymmetrically dominated option can significantly increase the attractiveness of a targeted product. To better understand this concept, consider the example of purchasing a smartphone. Imagine consumers are choosing between Smartphone A, priced at ₹25,000 with average features, and Smartphone B, priced at ₹32,000 with superior specifications. Many consumers may be uncertain because of the price difference. Now suppose marketers introduce Smartphone C, priced at ₹31,000 but offering features that are clearly inferior to Smartphone B. In this situation, consumers are more likely to compare Smartphones B and C instead of comparing A and B. Since Smartphone B is noticeably better than Smartphone C while costing only slightly more, it appears to provide greater value, increasing the likelihood that consumers will choose it.

This psychological response occurs because consumers typically evaluate products by comparing them with available alternatives rather than assessing each option in isolation. Instead of focusing solely on a product's absolute value, they judge its attractiveness relative to similar choices. As a result, the decoy influences consumers' perceptions without changing the actual features or quality of the products. Researchers have proposed several explanations for why the decoy effect occurs. One explanation focuses on comparative evaluation, suggesting that consumers naturally compare similar alternatives and prefer the option that appears to dominate another. Another explanation emphasises cognitive effort. Since evaluating many product attributes requires considerable mental effort, consumers simplify the process by selecting the option that appears clearly superior within a direct comparison.

Recent research has also highlighted the important role of attention in shaping the decoy effect. Eye-tracking studies by Marini et al. (2020) found that the presence of a decoy directs consumers' visual attention toward the target product. As consumers spend more time examining the dominant alternative, the likelihood of selecting it increases. These findings suggest that the decoy effect is driven not only by cognitive comparisons between options but also by attentional processes, indicating that multiple psychological mechanisms work together to influence consumer decisions.

2.3 Applications of the Decoy Effect in Consumer Behaviour

Although the decoy effect was first identified through controlled laboratory experiments, more recent research has shown that it is highly relevant in real-world marketing settings. Businesses across a wide range of industries now use decoy-based strategies to shape consumer preferences, strengthen product positioning, and boost sales. One of the most common applications is retail pricing. Companies frequently introduce a third pricing option that is deliberately less attractive than the product they intend to promote. Restaurants, electronic retailers, supermarkets, and subscription-based services regularly organise their pricing structures in ways that encourage customers to purchase premium products rather than basic alternatives.

The food industry is another area where the decoy effect has been widely examined. Xu et al. (2021) reported that the inclusion of strategically designed decoy options had a significant impact on consumers' meat purchasing decisions. Similar results have been observed for beverages, fast-food meals, desserts, and other grocery products. These findings suggest that consumers are more likely to perceive larger pack sizes or premium-quality products as offering greater value when they are compared with carefully positioned decoy alternatives. The rapid expansion of digital commerce has further increased the importance of the decoy effect. Online shopping platforms present multiple products simultaneously, allowing recommendation algorithms to arrange product displays strategically. Mousavi (2022) argues that digital recommendation systems increasingly incorporate behavioural principles to influence purchasing decisions. By carefully selecting which alternatives appear together, online retailers can subtly guide consumers towards products with higher profit margins. Subscription-based businesses also rely heavily on decoy pricing strategies. Streaming platforms, software companies, newspapers, and online educational services typically offer three subscription plans, with the middle option often designed to function as a decoy. This pricing structure encourages customers to choose the premium plan. While many consumers may initially be drawn to the least expensive option, the inclusion of an asymmetrically dominated middle plan often shifts their preference toward the higher-priced subscription. Financial decision-making represents another area where the decoy effect has demonstrated practical relevance. Investment products, insurance policies, and savings plan often involve complex decisions with multiple attributes. Research suggests that introducing carefully designed alternatives influences investors' portfolio choices, especially when consumers have limited financial knowledge. Overall, the existing literature consistently shows that the decoy effect extends far beyond any single industry. It has become a versatile marketing strategy that shapes consumer decisions across physical retail stores, e-commerce platforms, financial services, hospitality, healthcare, and educational services. Its broad applicability across diverse sectors is one of the key reasons why the decoy effect continues to be one of the most extensively studied behavioral phenomena in contemporary marketing.

2.4 Interaction of the Decoy Effect with Other Behavioral Biases

Although the decoy effect is commonly examined as a separate behavioral phenomenon, recent studies suggest that it rarely shapes consumer decisions on its own. In actual purchasing situations, consumers are influenced by several behavioral biases at the same time, with each one contributing to the final decision. Recognising these interactions is important because marketers seldom depend on a single psychological principle when developing pricing strategies, promotional campaigns, or product displays. Instead, they combine multiple behavioral techniques to enhance the overall effectiveness of their marketing efforts. One of the strongest relationships identified in the literature is between the decoy effect and anchoring bias. Anchoring occurs when consumers depend heavily on the first piece of information they receive while making a decision. Price is one of the most common anchors in marketing. When a high-priced product is displayed before lower-priced alternatives, consumers often perceive the remaining products as more affordable. The introduction of a decoy further strengthens this perception by making the target product appear to provide superior value relative to the decoy. As a result, consumers may believe they are making a rational and economical decision, even though their judgement has been influenced by the presentation of the available options. The framing effect is another behavioural bias that works closely with the decoy effect. Framing refers to the influence of how information is presented rather than the information itself. Consumers often respond differently to the same product depending on whether its features are described in a positive or negative way. For instance, a product advertised as having "90% customer satisfaction" is generally perceived more favourably than one described as having "10% customer complaints," despite both statements conveying identical information. When positive framing is combined with a carefully designed decoy, the target option becomes even more attractive. This illustrates that consumers evaluate products not only on their objective characteristics but also on the way alternatives are communicated. Another important behavioural bias linked to the decoy effect is status quo bias. Consumers frequently prefer familiar products or continue using existing services because changing to a new alternative requires additional effort and involves uncertainty. Pradana (2021) observed that the attraction effect created by decoys can sometimes overcome this natural resistance to change. By making one alternative appear clearly superior, marketers encourage consumers to reconsider their existing preferences and choose a different product. This finding is particularly relevant in financial services, insurance plans, and subscription-based businesses, where consumers often remain with default options. The connection between the decoy effect and loss aversion has also received considerable attention. Behavioural economists suggest that people experience the pain of losses more intensely than the pleasure of equivalent gains. As a result, consumers become increasingly sensitive to the possibility of missing a valuable opportunity. Marketers often reinforce decoy pricing by using promotional messages such as "limited-time offer," "exclusive deal," or "save

₹500 today." These messages increase the perceived cost of not choosing the target product, thereby strengthening the influence of the decoy. The scarcity effect further complements the decoy effect in many retail environments. Products labelled as "limited stock," "only a few items left," or "offer valid today only" create a sense of urgency. When consumers are simultaneously presented with a decoy option, they are less likely to spend additional time comparing alternatives and more likely to choose the recommended product quickly. This combination is particularly common in e-commerce platforms, airline ticket booking, hotel reservations, and online marketplaces. Recent developments in digital marketing demonstrate that behavioral biases are increasingly used together rather than in isolation. Online retailers frequently employ recommendation algorithms that combine several psychological principles at once. Consumers may first encounter a high-priced product that establishes an anchor, followed by a strategically positioned decoy that directs attention toward a more profitable alternative. At the same time, promotional messages highlighting limited availability or positive customer reviews create additional psychological influence. Consequently, purchasing decisions are often shaped by the combined effect of multiple behavioral mechanisms rather than by the decoy effect alone.The growing interaction among behavioural biases suggests that future research should move beyond studying individual biases separately. Consumers make decisions in complex environments where multiple cognitive influences operate simultaneously. A more integrated understanding of behavioural biases will enable researchers to develop more realistic models of consumer decision-making while helping organisations design marketing strategies that better reflect actual purchasing behaviour.

2.5 Ethical Considerations in the Use of the Decoy Effect

Although the decoy effect has been widely recognised as an effective marketing strategy, its increasing use has raised several ethical concerns. The central issue is whether influencing consumer preferences through psychological techniques should be considered a legitimate marketing practice or an unfair form of manipulation. As behavioral marketing becomes more common, preserving consumer trust is becoming just as important as achieving higher sales. Supporters of the decoy effect argue that marketers have always presented products in ways that help consumers compare alternatives more easily. From this perspective, the decoy simply provides additional information within the choice set without forcing consumers to purchase a particular product. Consumers remain free to evaluate all available options and make their own decisions. Therefore, proponents consider the decoy effect to be a legitimate decision-support tool rather than a deceptive practice. Critics, however, offer a contrasting perspective. They argue that consumers are often unaware that their preferences are being influenced by the way choices are structured rather than by the actual quality or value of the products. Because the decoy is deliberately designed to draw attention toward a specific option, consumers may believe they have made an entirely independent decision when, in fact, their judgement has been subtly influenced by the marketer. This raises important questions about consumer autonomy and the integrity of informed decision-making. Abduh and Pardiansyah (2022) emphasise that ethical marketing should promote transparency, honesty, and fairness in all business activities. Marketing strategies should help consumers make informed decisions rather than exploiting their psychological vulnerabilities. If decoy options are designed solely to maximise profits while encouraging consumers to purchase products that do not best meet their needs, such practices may reduce consumer confidence and damage long-term brand reputation. These ethical concerns become even more significant in the context of digital marketing. Modern e-commerce platforms collect extensive consumer data and use artificial intelligence to personalise product recommendations. Such technologies enable businesses to identify individual purchasing patterns and tailor decoy strategies to specific consumers. While this level of personalisation can enhance the shopping experience, it also increases the risk of influencing vulnerable consumers without their awareness. Younger individuals, older adults, and consumers with limited financial literacy may be especially susceptible to these practices. The issue of transparency is also important. Many consumer protection organisations argue that marketing techniques should be sufficiently clear so that customers understand why certain products are being recommended. Hidden psychological influences may reduce consumer confidence if customers later realise that their decisions were intentionally shaped by pricing structures or product displays. Another important issue relates to the long-term relationship between organisations and their customers. Although decoy strategies may generate short-term increases in sales, relying too heavily on behavioral manipulation can weaken customer loyalty over time. Consumers who feel they have been misled are less likely to make repeat purchases or recommend the brand to others. In highly competitive markets, maintaining customer trust often provides greater long-term benefits than achieving immediate sales growth. Despite these concerns, behavioural marketing should not automatically be viewed as unethical. The ethical acceptability of the decoy effect depends largely on how it is implemented. When organisations use decoys to simplify complex choices, improve product comparisons, and genuinely help consumers identify suitable products, the strategy may provide value to both businesses and customers. Problems arise only when the technique intentionally exploits consumer biases to encourage unnecessary or financially harmful purchases. Therefore, organisations should adopt responsible marketing practices that strike a balance between commercial objectives and consumer welfare. Transparent pricing, honest communication, and customer-focused product design can help ensure that behavioral marketing remains both effective and ethically responsible. As consumers become increasingly aware of marketing practices, companies that combine behavioral insights with ethical standards are more likely to build lasting customer relationships and achieve sustainable competitive advantages.

2.6 Research Gap

Although research on the decoy effect has grown substantially over the past decade, several important gaps still exist in the current body of literature. First, a large proportion of empirical studies have been conducted in developed economies using controlled laboratory experiments. Comparatively fewer studies have examined how the decoy effect operates in developing countries such as India, where consumer behaviour is shaped by diverse cultural, social, and economic factors. This limits the generalisability of existing findings across different market environments. Second, previous research has largely concentrated on specific product categories, including food products, subscription services, financial investments, and online shopping. Comparatively little attention has been paid to the Fast-Moving Consumer Goods (FMCG) sector, despite its high purchase frequency and highly competitive nature. Investigating the influence of the decoy effect on FMCG purchasing behavior could offer valuable insights for both academic researchers and marketing practitioners. Third, while several studies acknowledge that the decoy effect interacts with other behavioural biases, relatively few have examined these relationships comprehensively. Future research should investigate how multiple biases simultaneously influence consumer decision-making rather than studying each bias independently. Another notable research gap concerns ethical issues. Existing studies have primarily examined the effectiveness of decoy strategies in improving sales and influencing purchase decisions, while relatively little attention has been given to consumers' perceptions of fairness, transparency, and trust. As behavioral marketing techniques continue to evolve, these ethical dimensions deserve greater academic attention. Finally, the rapid growth of artificial intelligence, personalised recommendation systems, and digital commerce has created new opportunities for applying behavioural marketing techniques. However, research examining how AI-driven recommendation systems use decoy strategies remains limited. Future investigations should explore how technological developments influence consumer autonomy, privacy, and decision quality. Addressing these gaps will contribute to a deeper and more comprehensive understanding of the decoy effect while supporting the development of marketing strategies that are not only effective but also ethically responsible.

3. Research Methodology

This study employs a Systematic Literature Review (SLR) approach to explore the role of the decoy effect in consumer behavior and marketing. The SLR method was selected because it allows existing research to be collected, evaluated, and synthesized in a systematic and transparent way. Instead of generating primary data, this study integrates findings from previously published research to develop a comprehensive understanding of the topic. The literature search was conducted using well-recognised academic databases, including Scopus, Google Scholar, Springer, and Taylor & Francis. These databases were selected as they provide access to high-quality peer-reviewed journal articles in the fields of marketing, consumer behaviour, and behavioural economics.

Relevant studies were identified using keywords such as "Decoy Effect," "Asymmetric Dominance Effect," "Behavioral Biases," "Consumer Behavior," "Consumer Decision-Making," and "Marketing Strategy." These terms were searched both individually and in various combinations to ensure comprehensive coverage of the literature. The review primarily considered studies published between 2018 and 2024 so that the analysis would reflect recent developments in behavioral marketing research. The selected studies were screened using predefined inclusion and exclusion criteria. Only peer-reviewed journal articles, conference papers, and review articles directly related to the decoy effect and consumer decision-making were included in the study. Articles that lacked sufficient academic relevance, duplicate publications, non-English studies, opinion pieces, and retracted papers were excluded from the review. Following the screening process, nine studies met the established selection criteria and were included in the analysis. These studies covered a range of application areas, including retail marketing, food purchasing behavior, online recommendation systems, financial decision-making, and digital commerce. The selected literature was analysed by comparing the objectives, research context, methodology, and major findings of each study. Particular attention was given to understanding how the decoy effect influences consumer choice, its interaction with other behavioral biases, and the ethical issues associated with its application in marketing. The findings from the reviewed literature were subsequently grouped into common themes, forming the foundation of the results and discussion presented in the following section. This thematic approach helped identify recurring patterns, highlight practical implications, and reveal existing gaps in the literature.

4. Results and Discussion

4.1 Summary of Selected Studies

The systematic review examined nine studies published between 2019 and 2024 that explored the decoy effect in a variety of marketing and consumer decision-making contexts. These studies encompassed diverse areas, including retail pricing, food purchasing behavior, digital recommendation systems, financial decision-making, online surveys, and consumer psychology. Despite the differences in research settings and methodologies, the majority of the studies reached similar conclusions, demonstrating that the introduction of decoy options can significantly influence consumer preferences.

Sr. No.	Name of Author(s)	Publication year	Research Context	Major Findings of Research
1.	Marini et. al.	2020	Consumer Psychology	Experiments utilizing eye-tracking technology demonstrated that decoys direct consumers' attention toward the desired product.
2.	Sürücü	2019	Risky choice	The decoy effect exists under uncertainty but grows weaker in increasingly complicated choice circumstances.
3.	Xu et. al.	2021	Food Retail	Decoy pricing dramatically influenced customer purchases of meat products.
4.	Chand and Raj, 2021	2021	Consumer Decision Making	The decoy effect or the Decoy strategy and the attractive advertising successfully pushed respondents toward the higher-priced option in the choice experiments.
5.	Mousavi	2022	Recommendation system	Recommendation algorithms can successfully deploy decoys to enhance sales of target products.
6.	Stoffel	2023	Online Surveys	Decoy choices boosted response rates and participant engagement.
7.	Padamwar	2024	Literature review	Summarised four decades of research and identified parameters determining the decoy effect.
8.	Parrish	2024	Consumer behavior	Demonstrated that the efficiency of decoys varies according on product category and consumer involvement.
9.	Kurniawati	2024	Coffee Retail	Decoy pricing influenced clients' product preferences in a real retail scenario.

The selected research collectively suggest that the decoy effect is a reliable behavioral phenomenon that occurs across many industries and product categories. Although the strength of its influence varies depending on the decision environment, the overall data supports its value as a strategy or tactic of marketing.

4.2 Discussion

Influence of the Decoy Effect on Consumer Decision-Making

The review clearly indicates that the decoy effect plays a significant role in shaping consumer decision-making. Across nearly all of the selected studies, the introduction of a strategically designed third option influenced consumers' preferences, even though that additional alternative was seldom chosen. This finding supports the fundamental principle of behavioural economics that consumer preferences are often formed during the decision-making process rather than being fully established before the available alternatives are presented. Consumers generally evaluate products through comparison rather than through absolute judgement. When a decoy is positioned close to the target product but offers lower value, consumers perceive the target as the most attractive alternative. Consequently, businesses can encourage consumers to select products with higher profit margins without changing the actual quality or price of existing products.

Applications Across Different Industries

Another key finding of the review is the wide applicability of the decoy effect across different market settings. Although it was originally demonstrated through laboratory experiments, the strategy is now widely employed in supermarkets, restaurants, online shopping platforms, subscription-based services, financial products, and digital recommendation systems. The review indicates that retail businesses commonly use decoy pricing to increase sales of premium products. Similarly, online retailers arrange product displays and recommendation lists in ways that subtly guide consumers toward specific purchasing decisions. These findings suggest that the decoy effect has become increasingly relevant in digital commerce, where consumers compare multiple alternatives simultaneously.

The effectiveness of decoy strategies is also evident in food marketing. The studies included in this review suggest that consumers purchasing everyday grocery items are particularly responsive to comparative pricing structures. This finding highlights the Fast-Moving Consumer Goods (FMCG) sector as a valuable area for future research on the decoy effect.

Psychological Mechanisms Behind the Decoy Effect

The literature indicates that the effectiveness of the decoy effect is driven by multiple psychological mechanisms rather than a single underlying process. First, comparative evaluation encourages consumers to compare similar alternatives directly instead of evaluating products independently. Second key factor is attentional processing. Eye-tracking studies have shown that the introduction of a decoy increases the amount of time consumers spend examining the target option, thereby raising its likelihood of being selected. And third, cognitive simplification reduces the mental effort involved in complex decisions. Rather than analyzing every product attribute, consumers rely on simple comparisons to identify the alternative that appears to offer the greatest value.

Together, these psychological mechanisms help explain why even experienced consumers can be influenced by carefully structured choice environments.

Interaction with Other Behavioral Biases

Another significant observation from the reviewed studies is that the decoy effect seldom operates in isolation. Instead, it frequently interacts with other behavioral biases, including anchoring, framing, loss aversion, and status quo bias.

For example, when consumers first observe a high reference price, the target product appears relatively affordable because of anchoring. Similarly, positive framing of product benefits strengthens the attractiveness created by the decoy. Financial decision-making studies also suggest that decoys can reduce consumers' tendency to remain with default options.

These findings suggest that marketers increasingly rely on a combination of behavioral techniques to shape consumer purchasing decisions rather than depending on a single psychological strategy.

Ethical Considerations

Although the reviewed studies highlight the commercial advantages of the decoy effect, they also draw attention to several important ethical concerns. The primary issue relates to consumer autonomy. If consumers are unaware that their choices are being influenced by the structure of available options, questions arise regarding fairness and informed decision-making. The review suggests that organisations should use behavioral marketing strategies in a responsible and ethical manner. Adopting transparent pricing, maintaining honest communication, and designing products with consumers' needs in mind can help businesses achieve their commercial goals while upholding ethical standards. Long-term customer trust remains more valuable than short-term increases in sales. Therefore, organisations should ensure that behavioural marketing strategies create genuine value for consumers rather than simply exploiting psychological biases.

5. Managerial Implications

The findings of this review provide several practical insights for marketing managers and business organisations.
First, companies can use the decoy effect to improve product positioning by designing pricing structures that clearly highlight the value of target products. This strategy is particularly useful when introducing premium products or encouraging customers to upgrade to higher-value alternatives.
Second, retailers can apply behavioral insights to product displays, promotional activities, and online recommendation systems. Since consumers typically compare multiple alternatives before making a purchase, thoughtfully designed product assortments and pricing strategies can positively influence buying decisions and improve sales performance.
Third, organisations should ensure that behavioural marketing strategies remain transparent and customer-oriented. Building long-term customer relationships requires maintaining trust and avoiding practices that consumers may perceive as manipulative.
Finally, businesses operating in digital markets should integrate behavioural insights with ethical principles when using artificial intelligence and personalised recommendation systems. As digital marketing continues to advance, the responsible use of consumer data will become increasingly important for building credibility and maintaining customer confidence.

6. Limitations of the Study

This Research study contains some limitations and these are:
The review primarily includes studies published between 2018 and 2024, while earlier research has been referenced only when necessary to explain the theoretical foundations of the decoy effect.
Only English-language publications available through selected academic databases were included. Relevant studies published in other languages may therefore have been excluded.
The findings are based entirely on previously published research rather than primary data collected from consumers. Consequently, the conclusions depend on the quality, scope, and methodological rigor of the studies reviewed.
Furthermore, many existing studies have been conducted in developed countries, limiting the generalisation of findings to developing economies such as India.
Despite these limitations, the systematic review offers a comprehensive overview of recent developments in research on the decoy effect and its application in behavioural marketing.

7. Future Research Directions

This systematic review identifies some opportunities, which helps in further research.
Future studies should examine the effectiveness of the decoy effect in emerging economies, particularly within the Indian FMCG sector, where consumer behavior may differ considerably from that observed in Western markets.
Researchers should also examine how demographic factors such as age, income, education, and digital literacy influence consumers' susceptibility to decoy-based marketing strategies.
Given the rapid growth of e-commerce, artificial intelligence, and personalized recommendation systems, further research is needed to understand how these technological developments shape behavioral biases during online purchasing decisions.
Another promising area involves studying the combined influence of multiple behavioural biases rather than examining each bias independently. Such research would provide a more realistic understanding of consumer decision-making.
Finally, future research should continue to examine the ethical dimensions of behavioral marketing, with particular attention to issues such as consumer privacy, transparency, and the responsible use of psychological techniques.

8. Conclusion

The present study reviewed recent literature on the decoy effect to examine its role in influencing consumer behavior and marketing decisions. The findings confirm that the decoy effect is one of the most influential behavioral biases shaping consumer choice across a wide range of industries, including retail, food markets, financial services, and digital commerce.
The review demonstrates that consumers rarely evaluate products independently. Instead, their decisions are strongly influenced by the way alternatives are presented. Carefully designed decoy options encourage consumers to perceive target products as offering greater value, thereby increasing the likelihood of purchase.
The findings also reveal that the decoy effect frequently operates alongside other behavioral biases, such as anchoring, framing, loss aversion, and status quo bias. This suggests that consumer decision-making is a complex process in which multiple psychological factors interact simultaneously to shape purchasing behavior.
Although the decoy effect offers valuable opportunities for improving pricing strategies, product positioning, and marketing communication, its application should remain ethical and transparent. Organisations that balance commercial objectives with consumer welfare are more likely to achieve sustainable growth and long-term customer loyalty.

Overall, this review adds to the expanding body of knowledge on behavioral marketing by bringing together recent evidence, identifying key research gaps, and highlighting important directions for future research. As markets become increasingly competitive and digitally driven, understanding behavioral biases such as the decoy effect will remain essential for both researchers and marketing practitioners.

9. Theoretical Contribution of the Study

This review contributes to the growing literature on behavioral marketing by offering a comprehensive synthesis of studies on the decoy effect published between 2018 and 2024. While earlier research primarily focused on establishing the existence of the decoy effect through experimental investigations, the present review brings together evidence from diverse application areas, including retail, food markets, online shopping, financial decision-making, and digital recommendation systems.

One important contribution of this study is that it highlights the evolving role of the decoy effect in modern marketing. The review demonstrates that the decoy effect is no longer limited to traditional pricing strategies but has become increasingly relevant in digital commerce, subscription-based business models, and artificial intelligence-driven recommendation systems. This broader perspective provides a more complete understanding of how behavioral principles are being applied in contemporary marketing practice.

The review further highlights that consumer decisions are seldom influenced by a single behavioural bias. Instead, purchasing behaviour is often shaped by the combined effects of several cognitive biases, including anchoring, framing, loss aversion, and status quo bias. By examining these interactions, the study encourages future researchers to adopt a more integrated perspective on behavioural marketing rather than investigating individual biases in isolation.

Another contribution lies in identifying important gaps in the existing literature. The review points out that most empirical evidence originates from developed countries, while comparatively limited research has been conducted in emerging markets such as India. Similarly, the application of the decoy effect within the FMCG sector remains relatively underexplored despite the sector's economic significance and high purchase frequency. These observations provide a clear direction for future academic investigations.

Finally, the study underscores the need to balance marketing effectiveness with ethical responsibility. As organisations increasingly rely on behavioral insights to influence consumer decisions, transparency, fairness, and consumer welfare should remain central to marketing practices. By addressing these ethical considerations, the review extends the discussion beyond commercial outcomes and contributes to the broader debate on responsible behavioral marketing.

Overall, the review provides a consolidated understanding of recent developments in decoy effect research and offers a useful foundation for future theoretical and empirical studies in consumer behavior and marketing.

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