Ethical deployment of cognitive biases in marketing a framework for responsible influence

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Abstract: This paper examines the intersection of cognitive biases and ethical marketing practices, highlighting how psychological principles can influence consumer behavior within ethical boundaries. Cognitive biases such as scarcity bias, authority bias, the halo effect, and confirmation bias significantly shape consumer perceptions and decisions. However, their application in marketing raises complex ethical concerns, particularly regarding consumer autonomy and the potential for manipulation. This study proposes a conceptual framework that integrates ethical guidelines with marketing strategies that utilize cognitive biases. Through a comprehensive literature review and theoretical analysis, this paper outlines the implications of these biases in marketing, develops a set of ethical guidelines, and discusses the broader impacts on consumer trust and brand integrity. The findings give marketers practical insights for ethically harnessing cognitive biases, ensuring that marketing practices drive business success and maintain consumer respect and loyalty.

Keywords: cognitive biases; ethical marketing; consumer behavior; psychological influence; marketing ethics; consumer autonomy

1. Introduction

Cognitive biases are psychological tendencies that cause individuals to deviate from rational judgment. These biases significantly impact consumer decision-making processes, influencing perceptions and behaviors subtly yet powerfully. In marketing, cognitive biases are invaluable tools for crafting persuasive messages that resonate deeply with consumers (Rao and Hossain, 2024). As marketing strategies increasingly leverage these psychological insights, the role of cognitive biases in shaping consumer responses becomes more crucial. This understanding opens up profound opportunities for marketers to boost engagement and conversion rates, ultimately driving business success (Lobschat et al., 2021; Selem et al., 2023).

However, the strategic use of cognitive biases in marketing presents complex ethical challenges. The primary ethical concern is the potential for exploitation, where marketers might unconsciously or deliberately manipulate consumer decisions (Smith et al., 2013). Such manipulations can lead to severe ethical breaches, including the loss of consumer autonomy, unfair persuasion, and the erosion of trust in the brand. Additionally, the current landscape needs comprehensive guidelines that clearly define the boundaries of ethical influence in marketing (Lobschat et al., 2021; Tan et al., 2024). This ambiguity complicates determining what constitutes ethical marketing practices, necessitating a detailed investigation into the strategic use of cognitive biases and their ethical implications (Akter et al., 2023; Wang et al., 2022).
The objectives of this research are twofold. First, to systematically identify and describe critical cognitive biases relevant to marketing—such as scarcity bias, authority bias, halo effect, and confirmation bias—and assess their impact on consumer behavior. This analysis aims to map out the biases most commonly leveraged in marketing and evaluate their influence on consumer purchasing decisions. Second, to develop a framework of ethical guidelines for using cognitive biases in marketing. This framework can establish criteria to ensure marketing tactics are effective and ethically sound, promoting transparency and respecting consumer autonomy.

This research is significant as it addresses the urgent need for clarity and ethical guidance in applying cognitive biases within marketing strategies. By developing a structured ethical framework, this paper aims to contribute to the moral discourse in marketing practices, ensuring alignment with business objectives and consumer rights. Such guidance is crucial for maintaining consumer trust and loyalty, especially when marketing tactics are becoming increasingly sophisticated and pervasive.

The paper is organized into several key sections. The first section provides in-depth details of methodology, while the second section provides an exploration of cognitive biases, detailing their psychological underpinnings and manifestations in marketing. The third section addresses these biases’ ethical dilemmas, highlighting real-world ethical breaches and consumer backlash. The third section proposes a detailed framework of moral guidelines followed by a broad discussion, drawing on academic literature, legal standards, and marketing best practices. The conclusion synthesizes the findings and recommendations, offering clear directives for marketers on ethically harnessing cognitive biases to foster positive consumer relationships and drive business success.

2. Methodology

The methodology for this conceptual paper is structured around a comprehensive review and synthesis of existing theoretical literature related to cognitive biases and their ethical implications in marketing. The paper primarily utilizes a conceptual analysis approach, systematically identifying and examining various cognitive biases prevalent in marketing practices, such as scarcity bias, authority bias, the halo effect, and confirmation bias. This examination explores how these biases influence consumer behavior and decision-making processes from a psychological perspective (Akter et al., 2023; Ali et al., 2022).

Building on this theoretical foundation, the paper develops a conceptual framework that links these cognitive biases to ethical marketing practices. This framework is constructed through critical analysis and integrating insights from multiple disciplines, including psychology, marketing, and ethics. The focus is on articulating how marketers can yoke cognitive biases in ways that respect consumer autonomy and adhere to ethical standards (Akter et al., 2023). This involves a detailed discussion of the potential ethical dilemmas that arise when marketers exploit these biases and the development of ethical guidelines that marketers can follow to mitigate these risks. The paper is set, thus, to contribute to the academic discourse by providing a transparent, structured approach to understanding and applying cognitive biases.
ethically in marketing, supporting its arguments with comprehensive references to existing literature and theoretical constructs (Atreides, 2023).

3. Literature review

3.1. Cognitive biases

Cognitive biases are systematic patterns of deviation from norm or rationality in judgment, where inferences about other people and situations may be illogical. Individuals construct their own “subjective reality” from their perception of the input. This individual construction of social reality, not objective input, often dictates behavior in the social world. Consequently, cognitive biases can lead to perceptual distortion, inaccurate judgment, illogical interpretation, or what is broadly termed irrationality. Studying these biases is essential to understanding consumer behavior, particularly in examining how marketers’ communications influence decisions (Atreides, 2023; Azizzadeh et al., 2022).

The scarcity bias, for instance, enhances a consumer’s value perception of items that appear scarce, whether through limited quantities or limited-time offers. This taps into the basic survival instinct—items perceived as scarce are deemed more valuable, thus inducing consumers to act quickly to obtain them. The halo effect, however, involves a different cognitive shortcut where consumers generalize from a perceived positive trait (like the attractiveness or friendliness of a brand ambassador) to broader judgments of the brand’s overall attributes or the product’s effectiveness. This can significantly influence brand loyalty and consumer trust by allowing a single favorable impression to color the overall perception of an entire brand or product (Benjelloun and Kabak, 2024).

Authority bias occurs when individuals attribute greater accuracy to the opinions of authority figures. This bias influences consumer behavior by leveraging the perceived credibility of celebrities or experts. This bias often leads consumers to accept and prefer products these figures endorse, sometimes irrespective of product quality. In contrast, anchoring bias manifests when individuals rely excessively on the initial information they receive (the “anchor”) when making decisions. In marketing, the initial price presentation can set an anchor, and all subsequent judgments about value are made about this anchor. For example, a high original price set before a discount makes the discounted price appear even more attractive.

Confirmation bias involves the tendency to search for, interpret, favor, and recall information in a way that confirms one’s preexisting beliefs or hypotheses. This bias is particularly relevant in marketing, as consumers favor products and brands that align with their attitudes and dismiss information that contradicts their beliefs (Burr and Leslie, 2023). Marketers can dramatically affect consumer behavior by integrating these cognitive biases into marketing strategies. Understanding and employing tactics that leverage these biases can significantly enhance a product’s attractiveness and perceived value. However, this approach raises ethical questions about manipulating consumer perceptions and choices, necessitating a balanced and responsible application of these insights.
3.2. Ethics in marketing

Ethical marketing embodies the principles and values that guide marketing decisions, behaviors, and practices to promote honesty, responsibility, fairness, and respect for consumer rights. This approach is critical as it builds enduring trust between consumers and companies, enhances brand reputation, and ensures long-term organizational success. Indeed, accurate, truthful, and transparent information is essential in ethical marketing, enabling consumers to make informed decisions without deception or manipulation (Du and Xie, 2021; Irfan et al., 2024).

Moreover, the strategic deployment of cognitive biases in marketing taps into subconscious psychological triggers, making marketing efforts more effective but also susceptible to ethical scrutiny. Consequently, these practices necessitate a rigorous examination of where ethical lines should be drawn. Marketers must influence consumer behavior without crossing into manipulation, where the influence becomes an unethical orchestration of consumer decision-making (Hermann, 2022). This fine line demands constant ethical vigilance to avoid manipulative or exploitative practices.

Furthermore, exploiting cognitive biases can lead to significant ethical dilemmas, such as artificially inflating demand or exploiting emotional triggers. For instance, employing the scarcity bias might compel consumers to make hasty purchases without fully considering their needs or financial situation, driven by a manufactured fear of missing out on a limited offer. Similarly, leveraging authority bias can lead consumers to trust endorsements or expert opinions without critical evaluation, potentially leading them to purchase products that do not meet their expectations or needs (Hermann, 2022; Islam et al., 2022). Additionally, preserving consumer autonomy—the assurance that consumers have the agency to make independent decisions based on complete and accurate information (Benjelloun and Kabak, 2024; Basir et al., 2023)—is a cornerstone of ethical marketing. When marketers subtly influence decisions through biases like anchoring or the halo effect, they risk diminishing this autonomy by skewing perception and choice in a direction that may not reflect the consumers’ genuine interests. Ethical marketing, therefore, requires a commitment to fostering an environment where consumer choices are fully informed and free from undue influence (Burr and Leslie, 2023; Islam, 2024).

Transparency and honesty are the foundations of ethical marketing. They demand that all aspects of marketing—from advertising to direct consumer interactions—be conducted straightforwardly and transparently. This includes disclosing product limitations, the terms of any deals, and potential conflicts of interest. By prioritizing transparency, marketers respect the consumer’s right to make decisions based on factual and comprehensive information, thereby upholding the integrity of the marketing process. Furthermore, accountability is a critical component of ethical marketing practices. Marketers must be willing to accept responsibility for the broader impacts of their campaigns and strategies. This involves proactive evaluations to ensure that marketing practices, such as misleading claims or promoting unhealthy consumer behavior, do not harm consumers. Marketers should be prepared to modify or abandon strategies that, upon reflection, are found to compromise ethical standards (Burr and Leslie, 2023; Islam and Kirillova, 2020).

While cognitive biases can effectively achieve business objectives, such as
increased engagement and sales, they must be employed within an ethical framework that does not compromise consumer well-being. This balance is achieved through rigorous ethical oversight and a commitment to prioritizing long-term consumer relationships over short-term gains. Marketers must cultivate effective and ethically sound strategies, ensuring their tactics enrich the consumer experience and foster loyalty rather than disenchantment (Benjelloun and Kabak, 2024; Buhalis and Islam, 2022).

3.3. Theoretical framework

The theoretical framework developed for this paper tends to intricately link cognitive biases with ethical marketing practices, providing a structured approach to understanding how these psychological mechanisms influence consumer decisions and perceptions and how they can be aligned with ethical marketing standards. Cognitive biases affect how consumers process information, subtly guiding their choices and preferences (Atreides, 2023; Islam, 2023). This framework posits that while cognitive biases are naturally occurring, marketers’ intentional activation or manipulation of these biases requires careful ethical consideration and management to avoid consumer deception or manipulation.

To construct this framework, it is first essential to identify and define the critical cognitive biases most relevant to marketing practices. These include biases like the confirmation bias, where consumers prefer information that confirms their pre-existing beliefs; the scarcity bias, which makes items appear more desirable when they seem less available; the anchoring bias, where the first piece of information offered (often price) heavily influences decision-making (Burr and Leslie, 2023; Islam et al., 2023); and the halo effect, where one positive attribute of a product or brand disproportionately influences overall perception. The framework explores how these biases impact consumer behavior and decision-making processes, elucidating the psychological pathways through which marketing strategies can influence consumer perceptions and actions.

Moreover, the framework addresses the ethical implications of exploiting these biases in marketing. It involves discussing marketers’ responsibility when deciding how and when to leverage psychological insights. The ethical considerations are centered around autonomy, consent, and transparency, ensuring that marketing practices do not undermine consumers’ ability to make free, informed choices. Integrating principles of ethical marketing into the framework aims to provide marketers with guidelines on balancing effective influence with moral responsibility (Du and Xie, 2021; Islam, 2024). The framework also discusses the consequences of unethical practices, highlighting how short-term gains from unethical marketing can damage brand reputation and consumer trust. It argues for implementing ethical guidelines that protect consumers while allowing marketers to utilize psychological insights to enhance user experience and satisfaction. The framework suggests that ethical marketing not only complies with legal standards but also aligns with broader social expectations and norms about fairness and respect for consumer rights (Lobschat et al., 2021).

This theoretical framework bridges understanding cognitive biases and implementing ethical marketing practices. It provides a comprehensive view that helps
academics and practitioners navigate the complex landscape where psychology meets marketing ethics. Through this framework, the paper contributes to a more nuanced understanding of how marketing can influence consumer behavior ethically, fostering a marketing environment that respects consumer autonomy and promotes trust.

4. Discussion

Exploring cognitive biases within marketing campaigns reveals a complex interplay between consumer psychology and ethical considerations. Numerous examples of marketing campaigns have successfully and ethically utilized cognitive biases to enhance consumer engagement and decision-making. For instance, limited-time offers that communicate the availability period and conditions exploit the scarcity bias but do so transparently, ensuring consumers are fully aware of the terms (Rao and Hossain, 2024). Another example is social proof, where customer testimonials and user reviews are used to build trust and credibility without misleading potential buyers about the popularity or effectiveness of a product.

Conversely, analyzing examples where cognitive biases have led to ethical breaches offers critical insights into the dangers of their misuse. One notable example involved a company that exaggerated the scarcity of its products, falsely claiming that stock was nearly depleted to prompt immediate purchases (Lobschat et al., 2021; Selem et al., 2023). This manipulation breached ethical marketing standards and led to consumer mistrust and legal repercussions. Another example includes the use of deep discounting as an anchor, which can mislead consumers about the actual value of a product, resulting in purchases they might regret, which tarnishes the brand’s reputation over time (Smith et al., 2013).

Addressing these complex dynamics and developing ethical guidelines for marketers to follow when harnessing cognitive biases is essential. These guidelines should emphasize transparency, honesty, and respect for the consumer’s autonomy. Marketers should ensure that all information that could trigger cognitive biases (Lobschat et al., 2021; Tan et al., 2024) is presented as accurately as possible to avoid misleading consumers. For example, if employing the anchoring effect, marketers should present original prices alongside discounted prices to accurately reflect the value proposition, avoiding exaggerated price differences that could deceive consumers about the savings they are receiving (Lobschat et al., 2021; Wang et al., 2022).

Further discussion on how these guidelines can help prevent unethical marketing practices highlights the role of such frameworks in maintaining a fair marketing environment. By adhering to established policies, marketers can avoid the pitfalls of unethical practices that lead to consumer dissatisfaction, invite legal scrutiny, and damage brand integrity. The guidelines ensure that while cognitive biases are leveraged to optimize marketing strategies, they do not do so at the expense of ethical standards or consumer trust (Akter et al., 2023; Ali et al., 2022). Interpreting findings from examples and their implications for ethical marketing stresses the need for ongoing vigilance and adaptation of marketing practices. These examples illustrate the real-world applications of cognitive biases and the repercussions when they are misused. They serve as practical examples of why robust ethical guidelines are
necessary and effective in guiding marketers toward practices that honor both the spirit and letter of ethical marketing (Akter et al., 2023).

One of the paramount challenges in balancing effective marketing with ethical considerations is circumnavigating the thin line between persuasion and manipulation. Marketers are often tempted to push the boundaries of influence to achieve higher sales, but this can sometimes lead to practices that undermine consumer trust and decision-making autonomy (Atreides, 2023). Another challenge is the constant evolution of marketing tools and techniques, especially in the digital realm, which can quickly render existing guidelines obsolete. Therefore, marketers and regulators must continually interact with and update the ethical frameworks that govern marketing practices to ensure they remain relevant and robust against emerging marketing technologies and methodologies (Atreides, 2023; Azizzadeh et al., 2022).

Proposed framework

In exploring the ethical deployment of cognitive biases in marketing, it is crucial to critically assess how each component impacts consumer behavior and business practices. This examination helps us understand not only the psychological triggers involved but also the necessary ethical boundaries (Figure 1).

![Figure 1. Ethical deployment of cognitive biases in marketing.](image)

Firstly, identifying fundamental cognitive biases such as scarcity, authority, halo effect, and confirmation bias is foundational in crafting marketing strategies. For instance, when used responsibly, the scarcity bias can be a legitimate tactic to enhance perceived value and urgency, as seen with limited-time offers. However, this scarcity must be genuine rather than fabricated, as misleading consumers can lead to a loss of trust and potential legal issues. Similarly, leveraging authority bias involves using...
expert endorsements responsibly (Benjelloun and Kabak, 2024; Basir et al., 2023). A brand like Philips might employ dentists to endorse their electric toothbrushes, which can encourage trust and authority in the product’s effectiveness. Secondly, understanding the psychological impact of these biases on consumers helps marketers predict and shape consumer decisions. The halo effect, for instance, can lead consumers to assume that because they trust a brand’s one product, other offerings are equally trustworthy. Apple is a classic example, where intense customer satisfaction with one device, like an iPhone, enhances their perception of different products like MacBooks or iPads (Benjelloun and Kabak, 2024). However, marketers must ensure that this trust is not exploited but used to genuinely improve the consumer experience across products. Thirdly, developing ethical guidelines is imperative to safeguard consumer interests. These guidelines should clearly define the ethical use of psychological insights in marketing (Benjelloun and Kabak, 2024; Buhalis and Islam, 2022). For example, while it might be tempting to use anchoring bias by initially showing a higher price to make the actual price appear more appealing, this can be deceptive. Ethical guidelines require marketers to provide context and truthful information, ensuring consumers are not misled about price or quality (Burr and Leslie, 2023).

Moreover, upholding consumer autonomy and trust is fundamental. This involves transparent marketing practices that allow consumers to make informed decisions. For instance, a travel company should not imply that hotel prices are about to increase due to limited availability if that is not the case, as it pressures consumers to make rushed decisions that may not be in their best interest. Integrating these ethical guidelines into effective marketing strategies is also challenging and necessary (Du and Xie, 2021). Marketers must balance the effectiveness of using cognitive biases to influence consumer behavior with the obligation to remain truthful and respectful. For example, social proof, such as customer testimonials, can be powerful if it reflects genuine customer opinions and is not cherry-picked or fabricated (Du and Xie, 2021; Irfan et al., 2024).

Lastly, considering the role of regulatory oversight and self-regulation in maintaining ethical standards is essential. Regulatory bodies often step in to enforce compliance where marketing practices fail to meet ethical standards. Meanwhile, self-regulation within companies can lead to higher standards of practice that surpass basic legal requirements (Hermann, 2022). This proactive approach prevents ethical breaches and enhances brand reputation and consumer loyalty. Therefore, navigating cognitive biases in marketing requires a deep understanding of psychological mechanisms and their moral implications. Marketers can use these powerful tools responsibly by establishing and adhering to rigorous ethical guidelines, ensuring their strategies drive business success, and maintaining and enhancing consumer trust and loyalty. This balance of insight and integrity is crucial for the long-term sustainability of both brand reputation and consumer relationships (Hermann, 2022; Islam et al., 2022).

5. Conclusion and implications

This paper has explored the nuanced terrain of cognitive biases in marketing,
highlighting these psychological insights’ dual potential to enhance marketing effectiveness and pose ethical challenges. A critical insight is that the ethical use of cognitive biases requires a deep understanding of how they work and impact consumer decision-making. Ethical marketing practices must prioritize transparency, consumer autonomy, and honesty to prevent the exploitation of consumers’ psychological vulnerabilities.

Practical recommendations for marketers seeking to utilize cognitive biases ethically include developing and implementing clear ethical guidelines that all marketing personnel can follow. These guidelines should emphasize the importance of not misleading consumers about product qualities or availability and ensuring that all promotional material is explicit and truthful. Marketers should also attend regular training sessions to stay updated on ethical marketing practices and understand the latest consumer protection laws and regulations. Regarding regulatory oversight or self-regulation, both approaches have significant potential to play pivotal roles in shaping ethical marketing practices (Burr and Leslie, 2023). Regulatory bodies can provide a framework and legal backing to ensure that marketing practices do not cross moral boundaries, protecting consumers from deceptive marketing practices. However, self-regulation within the industry is equally crucial, as it allows for more flexibility and quicker adaptation to new marketing technologies and strategies. Companies should be encouraged to adopt strict ethical standards, which often go beyond what is legally required, to build consumer trust and loyalty (Lobschat et al., 2021).

Reflections on the future of marketing practices in light of ethical considerations suggest that as technology continues to evolve, so too will the methods by which marketers can leverage cognitive biases. The increasing sophistication of digital marketing tools, such as AI and data analytics, means marketers will have even more powerful means to influence consumer behavior. However, this also increases the responsibility of marketers to ensure these tools are used ethically. Looking forward, the marketing industry must continue to foster a culture of ethics that evolves with technological advancements and remains steadfast in protecting consumer interests.

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