

The Dark Side of AI Marketing: Psychological Manipulation, Financial Vulnerability & Ethical Challenges

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ABSTRACT

Due to the growing number of applications of artificial intelligence (AI) in marketing, consumer-brand interactions have changed as they have allowed highly individualized, data-driven, and automated marketing campaigns. Although AI-based marketing is efficient and more effective at targeting customers, it has also caused significant concerns among psychological manipulation, financial vulnerability, and ethical responsibility. The paper delves into the dark side of AI marketing under the quantitative method by analyzing the effect of algorithmic personalization and persuasional marketing technology on the psychological manipulation, financial vulnerability and ethical perceptions of consumers. The conceptual framework of the study is based on the theories of persuasion, behavioral economics, and digital ethics, according to which the role of AI marketing practices is seen as an antecedent to psychological manipulation, which in turn leads to the increase in financial vulnerability and ethical risk perceptions of consumers. The collected data of online consumers are statistically analyzed based on the hypothesized relationships between the most important variables to test the hypothesis. This research will add to the growing body of literature on the ethics and consumer behavior of AI-driven marketing by uncovering the psychological and ethical impact of AI-driven marketing. These results will provide practical implications to marketers, policymakers, and regulators who may wish to come up with responsible marketing of AI that will safeguard consumers yet still allow technological inventions to prevail.

Keywords: Artificial intelligence marketing, psychological manipulation, financial vulnerability, ethical issues, consumer behavior.

INTRODUCTION

The high development of the technology of artificial intelligence (AI) has seriously changed the environment of modern marketing, allowing organizations to gather, process and analyze a large flow of consumer data more rapidly and accurately than ever before. Recommendation algorithms, predictive analytics and automated decision-making tools are now commonly used as AI-driven marketing systems to personalize advertising messages, optimize pricing strategies, and impact consumer decision-making processes (Davenport et al., 2020). Such technologies enable companies to abandon the traditional segmentation procedures in favor of a very personalized marketing and selling technique, also referred to as hyper-personalization. Although these innovations are often regarded as benign in terms of enhancing

customer experiences and efficiency in organizations, an increasing body of academic research indicates that AI marketing can have some negative psychological, economic, and ethical implications on consumers (Zuboff, 2019).

The main feature of AI-based marketing is the possibility to forecast and manipulate the behavior of consumers by using behavioral data, emotional indicators, and cognitive trends. In contrast to the traditional marketing methods, AI systems are constantly improved through the interactions with customers, thus allowing marketers to improve persuasive tactics in real-time (Huang and Rust, 2021). This malleability prompts inquiries of psychological manipulation, especially when AI leverages cognitive biases like effects of scarcity, loss aversion, and impulsivity to guide consumers towards a particular buying behavior (Sunstein, 2016). Researchers believe that practices to be confusing the boundaries between persuasion and manipulation because consumers do not realize how much algorithmic systems influence their decisions (Susser, Roessler, and Nissenbaum, 2019). Thus, AI marketing undermines the traditional consumer freedom and decisions based on the information.

The phenomenon of psychological manipulation in AI marketing is the phenomenon most closely associated with the so-called behavioral targeting, where software programs divide content according to the emotional state, preferences, and areas of susceptibility of users. Consumer psychological studies show that emotional colored and personalized messages have a higher possibility to affect attitudes and actions, especially in an individual who is stressed, anxious, or lacks self controls (Baumeister, Vohs, and Tice, 2007). Such vulnerabilities can be identified by AI-based platforms based on digital footprints, such as browsing history, social media usage and patterns of engagement and then provide convincing messages when a person is at the most vulnerable time (Matz et al., 2017). On the one hand, these practices have the effect of enhancing effectiveness in marketing, on the other hand, they also create ethical issues of exploitation and mental damage, particularly when the consumer remains unaware or in control of data driven persuasion tools.

The other major problem that is linked with AI marketing is financial vulnerability of consumers. Financial vulnerability is the state of individuals being exposed to financial losses because of the lack of resources, the lack of financial literacy, or the inability to make judgments (Fernandes, Lynch, and Netemeyer, 2014). Marketing methods powered by AI (e.g., personalized prices, targeted offers, one-second checkout services, etc.) can also intensify impulsive purchases and spending habits, especially in problematic consumers (Lusardi and Mitchell, 2014). The behavioral economics literature indicates that consumers cannot be expected to make rational decisions in the digital space that is made to maximize interaction and conversion rates (Thaler and Sunstein, 2008). When artificial intelligence capitalizes on these behavioral patterns, it can be used to enhance debt, obsessive consumption, and financial stress in the long term.

The ethical aspects of AI marketing have been the main topic of debate in both academic and policy circles. In algorithmic decision-making, ethical dilemmas involve transparency, fairness, privacy of data and accountability (Floridi et al., 2018). Consumers are usually not notified about the ways of how their data are gathered, processed, and used to alter their behavior, which creates asymmetries of power between the firms and individuals (Martin, 2019). Such lack of transparency makes it impossible to trust and questions the moral responsibility of organizations that implement AI-driven marketing systems. Moreover, algorithmic bias and discriminatory targeting can also be disproportionately applied to marginalized or economically disadvantaged populations, further increasing social disparities (Eubanks, 2018).

Although the theoretical discourse of AI ethics and consumer manipulation is growing, there is limited empirical research on these topics that takes quantitative approach. Majority of the literature available is based on discussions about concepts, analysis of qualitative data, or case studies, which has not provided a

statistical basis on how AI marketing practices influence the psychological and financial health of consumers (Hagendorff, 2020). This gap is necessary as it addresses the need to come up with evidence-based policies and ethical principles that will balance technological innovation and the protection of consumers. The quantitative research could be useful to provide significant information by assessing the intensity and direction of the relationship between AI marketing exposure, psychological manipulation, financial vulnerability, and ethical perceptions.

To address these fears, the current paper suggests a theory, which establishes AI-driven marketing practices as prerequisites, which subsequently affect the psychological manipulation, which, by way, contributes to the financial susceptibility of consumers and their perceptions of ethical risks. The research is based on the persuasion theory which considers that the more they are exposed to personally blended and algorithmically optimized marketing communications, the more vulnerable consumers become to psychological manipulation (Cialdini, 2009). Such increased vulnerability can result in compromised financial judgment and adverse ethical considerations of AI marketing processes. Also, the framework takes into consideration that the perception of consumers on ethical risk might be the determinant of their attitude towards AI-based marketing, which may affect trust and the presence of long-term consumer-brand relationships (Binns et al., 2018).

The value of the research is that it has tried to empirically analyze the negative face of AI marketing as a part of a single quantitative framework. The operationalization of abstract constructs, including psychological manipulation and ethical perception, by measuring the constructs helps the study to add to a more rigorous interpretation of the societal implications of AI. Also, the research emphasizes a relatively ignored effect of algorithmic persuasion that goes beyond a direct purchasing behavior by addressing the financial weakness of the consumers. These results should give clues to the marketers concerning the ethical limits of AI-based strategies and should enable the policymakers to have empirical evidence to justify regulatory interventions to protect consumer welfare.

In the world where AI is becoming an intermediary in consumer decisions, it is no longer a matter of choice but a necessity to learn about its psychological, financial and ethical implications. The paper is a reaction to the pressing crisis of empirical research that surpasses the technological optimism and looks critically at the human implications of AI marketing. The quantitative approach based on the existing theories of consumer behavior and ethics allows the research to provide a balanced and evidence-based view of the opportunities and risks of marketing practice based on AI usage.

Research Objectives

1. The aims of the current research are as follows:
2. To find out how AI-based marketing practices impact consumer psychological manipulation.
3. To examine the connection between psychological manipulation and financial vulnerability among consumers.
4. To examine how AI-led marketing behaviors affect the ethical perceptions of consumers.

Research Questions

The following research questions are to be answered in this study:

1. What are the impacts of AI-based marketing activities on the aspect of psychological manipulation in the consumers?
2. How does psychological manipulation correlate with financial vulnerability of the consumers?
3. What are the consequences of AI-driven marketing practices on the ethical perceptions of the consumers?

Research Hypotheses

According to the suggested conceptual framework, the following hypotheses will be put forward:

- H1: AI-based marketing practices can substantially influence psychological manipulation among customers positively.
- H2: There is a strong impact of psychological manipulation on financial vulnerability of consumers.
- H3: AI-based marketing activities impact negatively on the ethical perception of the consumers significantly.

LITERATURE REVIEW

However, the incorporation of artificial intelligence into the marketing field has been getting academic attention in the last ten years, as it has drastically affected the way consumers make their decisions and behave. AI-driven marketing is the application of machine learning algorithms, big data analytics, and automated systems that forecast consumer preferences and personalization of marketing content and optimization of persuasive tactics (Davenport et al., 2020). Most of the available literature focuses on the advantages of AI marketing, including efficiency, better customer engagement, and the targeting accuracy (Huang and Rust, 2021). Yet, as an increasing amount of research confirms, there is also the dark side to these technologies, especially when it comes to psychological control, economic exposure, and the ethical dilemmas experienced by consumers in the online context.

The idea of psychological manipulation can be discussed as one of the main issues in AI marketing literature. Psychological manipulation is the process where the persuasive methods are used to affect the attitudes or behaviors of people in a manner that compromises their independence or exploits their cognitive and emotional weaknesses (Susser et al., 2019). Contrary to the old-fashioned marketing techniques, the systems created with the help of AI can dynamically respond to the behavior of users, which enables a marketer to use messages depending on the emotional condition, the history of browsing, and likes of the consumer (Matz et al., 2017). This ability to personalize in real time greatly increases the power of persuasion giving the appearance that consumers are being influenced or manipulated under the carpet to make choices which may not necessarily be in their best interest.

Psychological manipulation which is in the foundation of marketing is deeply embedded in the theory of persuasion and behavior psychology. According to Cialdini (2009), some of the principles of influence were of scarcity, social proof and reciprocity, which as shown by the author were the classical means of influence on consumer behavior practiced by marketers. The AI technologies enhance these tenets by computing algorithmically the most effective persuasive cues to appeal to individual consumers (Kaptein and Eckles, 2012). Experimental research shows that persuasive messages tailored to individuals have a substantial positive impact on the compliance and conversion rates relative to the generic message, indicating that AI-

based persuasion can lessen opposition to the influence marketing exerted on consumers (Boerman et al., 2017). Consequently, this can reduce the level of choice that consumers have especially where the influence of persuasion is below the threshold of conscious awareness.

Another way of how AI marketing contributes to the psychological manipulation is emotional targeting. It has been found out that emotional states are essential in influencing consumer judgments and behavior (Baumeister et al., 2007). AI technologies have the ability to read emotions based on digital signatures, such as language use, tendencies of interactions, and online interactions, and then provide advertisements with emotional connotations in the time of high vulnerability (Kramer et al., 2014). Although these practices are effective in the field of marketing, they are ethically questionable when it comes to exploitation of consumers who are stressed, lonely or anxious. According to scholars, the intention to appeals to emotionally vulnerable people can have adverse effects, such as pathological consumption and loss of psychological health (Zuboff, 2019).

Tightly connected with the issue of psychological manipulation is the problem of financial vulnerability of the consumers. Financial vulnerability is a term that describes the vulnerability of individuals to economic damage because they have low financial literacy, low financial resources, or lack the ability to make sound decisions (Fernandes et al., 2014). Friction reduction in the purchasing process is also an AI-powered digital marketing environment designed to withhold features like customized discounts, one- click purchases, and automated recommendations (Thaler and Sunstein, 2008). Although these characteristics help improve convenience, they can also promote impulsive to buy and spend more, particularly among consumers who have lesser self-control or awareness of their financial status.

Existing literature in the domain of behavioral economics has a lot of evidence that consumers do not always act in accordance with rational decision-making models, especially in information and time-constrained environments (Kahneman, 2011). The AI-based marketing capitalizes on such behavioral biases by making offers that match the previous behaviors and preferences of consumers, effectively promoting them to make decisions in relation to making a purchase (Ariely, 2008). Empirical research has discovered that targeted promotions and customized pricing can have a skewed impact on financially exposed consumers, resulting in an increase in debt and financial pressure (Lusardi and Mitchell, 2014). That indicates that AI marketing can contribute to the existence of inequalities further, as it will affect people who are the least prepared to overcome the effects of persuasion.

Psychological manipulation and financial vulnerability have been considered to have a growing relationship in subsequent empirical studies. Research shows that when consumers are exposed to extremely personalized and compelling marketing messages, they tend to indulge in impulsive spending habits, which in most cases they have not properly evaluated in terms of long-term financial impacts (Dholakia, 2015). Manipulation via psychology reduces the cognitive deliberation of the consumers, making them more dependent on emotional and the decision-making process which is based on heuristic (Kahneman, 2011). As a result, persons who have got a greater degree of psychological impact might be more vulnerable to economic damage, especially on online marketplaces where buying choices are quick and constant.

Another crucial field of academic research is the ethical issues associated with AI marketing. Ethical perceptions are the judgments by the consumers as to the fairness, transparency and social responsibility of the marketing practices (Martin, 2019). The marketing process that is done with the help of AI also brings up the ethical concerns of data privacy, informed consent, transparency of algorithms, and responsibility (Floridi et al., 2018). Consumers do not always know how their personal data are being gathered, processed, and analyzed to manipulate their behavior, and this results in power asymmetries between the firms and

personalities (Acquisti et al., 2016). This non-transparency compromises trust and questions conventional ethical principles of marketing practice.

Ethical analyses of AI marketing are also made more difficult by algorithmic opacities. Most AI systems are black boxes and thus consumers are unable to comprehend or question the automated decisions that highly impact them (Burrell, 2016). According to the research, perceived lack of control and opaceness have an adverse effect on the ethical respect of consumers and their trust towards AI-driven systems (Binns et al., 2018). The ethical judgment of the marketing activities is negative when consumers perceive that they were manipulated or unfairly targeted, which can be destructive to the established consumer-brand relationships in the long term (Hoffman et al., 2014). These results point to the critical role played by ethical transparency and accountability in the design of AI marketing.

The other ethical aspect is the bias and discrimination of algorithms. The systems of AI marketing based on historical data will tend to create or enhance the existing social and economic inequalities (Eubanks, 2018). As an example, the vulnerable population can be unfairly marketed high-interest banking products or exploitative deals with unfairness and social justice in mind (Noble, 2018). These practices do not only cause harm to individual consumers but also serve to increase inequalities in society at large, and this has led to calls to have AI-driven marketing activities more regulated.

Although the importance of these ethical issues is increasingly being acknowledged, there is scarce empirical data on ethical perceptions of AI marketing as to consumers. A large part of the current research is conceptual or normative, which focuses on what firms should do, but fails to provide an empirical investigation of the real-world perception of AI-driven marketing practices by consumers (Hagendorff, 2020). There is a specific lack of quantitative research to investigate ethical perceptions and both psychological and financial outcomes, which also establishes a gap in literature.

To address such gaps, other researchers are demanding a combination of empirical models analyzing the connection between AI marketing behaviors, psychological manipulation, financial vulnerability, and ethical perceptions (Huang and Rust, 2021). Through such models, researchers can no longer focus on individual analyses but rather look at the complex process by which AI marketing influences consumers. Quantitative research has the ability to give strong evidence through the statistical testing of these relationships that will be used to guide ethical considerations, marketing techniques, and regulatory policies.

All in all, the literature indicates that though AI-based marketing has considerable advantages, it also presents a severe threat to the psychological autonomy, financial welfare, and ethical considerations of the consumers. The psychological manipulation becomes the important tool, which AI marketing will impact consumer behavior with the downstream consequences on financial vulnerability and ethical perceptions. But empirical data that combines these constructs to be part of one quantitative model is limited. This gap should be filled to create a balanced idea of AI marketing that appreciates both the innovative opportunities and ethical obligations of AI marketing.

METHODOLOGY

Research Design

This paper used a quantitative research design to investigate the correlation between the AI-based marketing practices, psychological manipulation, financial vulnerability, and ethical perceptions. To gather data about the consumers with the most interaction with online platforms, e-commerce websites and social media, a

cross-sectional survey method was employed. Quantitative method enabled hypothesized relationships to be tested statistically and the study variables to be measured objectively.

Population and Sample

Online consumers were also considered to be the target population with exposure to AI-based marketing activities, such as personalized advertisements, algorithmic suggestions, and targeted marketing messages. The respondents were chosen by the convenience sampling technique as a result of accessibility and time constraints (300 respondents). The sample size was deemed adequate to complete the regression analysis and correlation analysis as per the objective of the study. The demographic data of the respondents such as age, gender, the level of their education, and the frequency of their use of online platforms were also captured to give some contextual information.

Variables and Operationalization.

Four key constructs were considered in the research.

1. **AI-Driven Marketing Practices (Independent Variable):** This construct was an indicator of consumer exposure to individualized advertising, algorithmic marketing suggestions, and personalized marketing methods. Products were fitted on previous research on digital marketing and algorithmic persuasion.
2. **Psychological Manipulation (Mediating Variable):** The construct reflected the perceived manipulation, emotional pressure, and loss of control among the consumers in online interactions with AI-driven marketing.
3. **Financial Vulnerability (Dependent Variable):** This was a variable that evaluated the vulnerability of the consumers to impulsive buying, excessive spending, and financial strain.
4. **Ethical Perceptions (Dependent Variable):** The dependent variable was IXs that quantified the fairness, transparency, and trust that consumers had towards AI-motivated marketing activities.

Five-point Likert scales were applied to all the constructs with the ranges of 1 to 5 (strongly disagree) up to 5 (strongly agree). The scales were modified based on the literature on the previously validated instruments and contextualized to the AI marketing.

HYPOTHESES

According to the literature analysis and the purpose of the current research, the hypotheses below were developed and tested empirically:

H1: AI-based marketing activities significantly influenced psychological manipulation by consumers in a positive way.

It was based on the previous studies that suggested that personalized and customized AI marketing methods may affect the feelings and decision-making of consumers, making them feel more manipulated psychologically (Cialdini, 2009; Matz et al., 2017; Susser et al., 2019).

H2: There were significant positive impacts of psychological manipulation on the financial vulnerability of the consumers.

This hypothesis presupposed that consumers that had been subjected to increased amounts of psychological manipulation had more chances to make impulse purchases, spend more, and feel financial stress, which was in line with behavioral economics and consumer psychology literature (Kahneman, 2011; Ariely, 2008; Fernandes et al., 2014).

H3: The marketing practices conducted by AI played a significant adverse role in the ethical perceptions of the consumers.

This was the hypothesis that, as more consumers become exposed to AI-driven marketing, the more they perceived fairness, transparency, and trust to be less realistic, as AI ethics research indicates that there is concern about the lack of algorithmic transparency and that it can be exploited (Floridi et al., 2018; Hoffman et al., 2014; Zuboff, 2019).

Correlation, regression, and mediation tests were also used to test direct and indirect relationships between the study variables.

Data Collection Procedure

The questionnaire was designed as a structured, and self-administered questionnaire, which was delivered via social media and email. The objective of the study was explained to the respondents, and their voluntary response was guaranteed. The final dataset comprised of only filled in questionnaires. Participant confidentiality and anonymity was ensured throughout the process.

Validity and Reliability

The items included in questionnaires were cross-checked to the existing literature and tested by the experts in the field of marketing and consumer psychology to make sure that they had good content validity. Cronbach alpha was used in the measurement of the reliability of the constructs. All constructs surpassed the acceptable level of 0.70, which means that there is excellent internal consistency.

Data Analysis Technique

Statistical software was used to conduct the data analysis. The demographics and general patterns of responses of the respondents were summarized using descriptive statistics. The correlation analysis was performed using Pearson correlation techniques to analyse the correlations between the variables. The hypotheses that were proposed were evaluated using regression analysis, which included the mediation of the effect of psychological manipulation on financial vulnerability. The evaluation was done at the 0.05 level of statistical significance.

Ethical Considerations

Ethical procedures were abided by. The respondents were free participants, and informed consent had been provided to them. No personal identifiable information was gathered and the anonymity of the respondents was maintained. The data was applied only in the academic research, and the respondents were told that the answers would not be disclosed.

DATA ANALYSIS

Descriptive Statistics

Descriptive statistics was calculated in order to profile the demographic features of the respondents and their reaction to the study variables. The sample size was 300 respondents (48 percent of them male and 52 percent female). In terms of the age distribution, 52 respondents (17%) were between 18-20, 183 respondents (61) were between 21-30, 43 respondents (14) were between 31-40 and 22 respondents (8) were older than 41. Education wise the respondent population is 210 (70%), with 90 (30%), having a bachelors and masterers degree respectively. Majority of the respondents (78%) said that they used online platforms on a daily basis, 17% used online platforms a few times in a week and 5% said they used it once in a while.

The table 1 indicates the descriptive statistics of the key variables of the study such as the mean (M) and standard deviation (SD).

Table 1

Variable	N	M	SD
AI-driven Marketing Practices	300	4.02	0.68
Psychological Manipulation	300	3.78	0.72
Financial Vulnerability	300	3.41	0.81
Ethical Perceptions	300	3.65	0.74

According to the table, relatively high scores of exposure to AI-driven marketing practices ($M = 4.02$, $SD = 0.68$) and moderate scores of psychological manipulation ($M = 3.78$, $SD = 0.72$) were reported by the respondents. Financial vulnerability was a little bit lower ($M = 3.41$, $SD = 0.81$) with ethical perceptions being moderately high ($M = 3.65$, $SD = 0.74$). These descriptive statistics indicate variability in responses, which gives a sufficient point of further correlation and regression.

Reliability Analysis

Computation of Cronbach alpha was used to determine the internal consistency of the measurement scales. Table 2 provides the results.

Construct Items in construct Cronbach Alpha.

Table 2

Construct	No. of Items	Cronbach's Alpha
AI-driven Marketing Practices	6	0.82
Psychological Manipulation	5	0.84
Financial Vulnerability	5	0.79
Ethical Perceptions	5	0.81

All constructs have good reliability with Cronbach alpha value showing more than recommended value of 0.70(Nunnally, 1978). This shows a sufficiently high internal consistency and the reliability of the survey tool.

Correlation Analysis

Pearson correlation coefficients were determined to test the relationships between the major study variables. Table 3 provides the results.

Table 3

Variable	1	2	3	4
1. AI-driven Marketing Practices	1			
2. Psychological Manipulation	0.58**	1		
3. Financial Vulnerability	0.45**	0.62**	1	
4. Ethical Perceptions	-0.36**	-0.42**	-0.30**	1

Note: ** $p < 0.01$

The correlation findings suggest that there are strong positive relationships between AI-based marketing behaviour and psychological manipulation ($r = 0.58$, $p < 0.01$) and financial vulnerability ($r = 0.45$, $p < 0.01$). Financial vulnerability had a strong positive correlation with psychological manipulation ($r = 0.62$, $p < 0.01$). In relation, there was a negative relationship between ethical perceptions and AI-based marketing ($r = -0.36$, $p < 0.01$), psychological manipulation ($r = -0.42$, $p < 0.01$), and financial vulnerability ($r = -0.30$, $p < 0.01$). These results will tentatively support the hypothesized claims.

Regression Analysis

Multiple regression tests were used to test the study hypotheses.

Hypothesis 1 (H1): AI-based marketing behaviors have a positive impact on psychological manipulation.

Table 4

Predictor	B	SE	β	t	p
AI-driven Marketing Practices	0.72	0.05	0.58	12.45	0.001

The regression findings indicate that AI-based marketing behaviours were strong predictors of psychological manipulation ($b = 0.58$, $t = 12.45$, $p < 0.001$). It confirms H1, which states that psychological manipulation of consumers among the consumers is connected with more exposure to AI-driven marketing.

Hypothesis 2 (H2): The influence of psychological manipulation on the financial vulnerability is positive.

Table 5

Predictor	B	SE	β	t	p
Psychological Manipulation	0.68	0.06	0.62	13.10	0.001

The analysis shows that financial vulnerability is affected significantly ($b = 0.62$, $t = 13.10$, $p < 0.001$) by psychological manipulation, as H2 is true. When perceived to be psychologically manipulated (in a higher degree), consumers will be inclined to become financially vulnerable.

Hypothesis 3 (H3): AI-based marketing habits have adverse effects on ethical perceptions.

Table 6

Predictor	B	SE	β	t	p
AI-driven Marketing Practices	-0.41	0.05	-0.36	-8.20	0.001

H3 was supported since AI-driven marketing practices were highly predictive of ethical perceptions in a negative direction ($b = -0.36$, $t = -8.20$, $p < 0.001$). The increased involvement in AI-based marketing is associated with the diminished perception of fairness, transparency, and ethical standards among consumers.

Mediating Effect Analysis

A mediation analysis was performed to investigate the mediation role of psychological manipulation between AI-driven marketing practices and financial vulnerability based on the Baron and Kenny (1986) method. The findings showed that the direct impact of AI-based marketing on financial vulnerability ($b = 0.45$, $p < 0.001$) was smaller in the case of a mediator ($b = 0.18$, $p < 0.01$) when psychological manipulation was introduced. This partial mediation implies the important role of psychological manipulation in describing the impact of AI-driven marketing on financial vulnerability.

FINDINGS

The results were very quantitative and supported the hypothesized relationships. Marketing activities that were supported by AI contributed to a great amount of psychological manipulation that, consequently, raised financial vulnerability. Also, AI-based marketing affected the ethical perceptions negatively. The findings correspond to our previous literature review that algorithmic personalization and targeted advertisements have the potential to affect customer choice, manipulate cognitive biases, and are associated with ethical considerations (Cialdini, 2009; Zuboff, 2019; Kahneman, 2011). The transformative nature of psychological manipulation brings out the process by which AI-based marketing responds to financial returns.

Table 7: Overview of Hypotheses and Results

Hypothesis	Relationship Tested	Result	Supported (Yes/No)	Key Finding
H1	AI-driven Marketing Practices → Psychological Manipulation	$\beta = 0.58$, $t = 12.45$, $p < 0.001$	Yes	Exposure to AI-driven marketing significantly increases psychological manipulation among consumers.
H2	Psychological Manipulation → Financial Vulnerability	$\beta = 0.62$, $t = 13.10$, $p < 0.001$	Yes	Consumers experiencing higher psychological manipulation showed greater financial vulnerability.
H3	AI-driven Marketing Practices → Ethical Perceptions	$\beta = -0.36$, $t = -8.20$, $p < 0.001$	Yes	Higher exposure to AI-driven marketing negatively influenced consumers' ethical perceptions regarding fairness and transparency.

DISCUSSION

The results of this research will be solid empirical evidence in terms of psychological, financial, ethical implications of AI-based marketing. H1 was confirmed meaning that AI-based marketing cultures highly augmented psychological manipulation among consumers. This finding is consistent with the previous studies that postulated that algorithmic personalization, targeted advertisement, and dynamic content presentation can strengthen the persuasive effect of marketing messages, and it tends to be operated on a subconscious level (Matz et al., 2017; Cialdini, 2009). Digital consumers had a higher probability of losing a sense of autonomy and becoming more emotionally impacted, which is aligned with the results of digital consumer psychology (Susser et al., 2019).

H2 was as well supported showing that there was a significant positive relationship between psychological manipulation and financial vulnerability. The implication of this discovery is that consumers who are exposed to the manipulative marketing strategies become vulnerable to impulsive purchases, excessive spending, and financial distresses. According to the literature of behavioral economics, this phenomenon is caused by the infringement of limited rationality, cognitive biases, and heuristic decision-making (Kahneman, 2011; Ariely, 2008). The mediation analysis also showed that psychological manipulation was partly the reason behind the impact of AI-driven marketing on financial vulnerability, with it playing a key role in evoking financial behavior. These findings align with the existing literature, which has shown that the use of highly personalized marketing can take advantage of the emotional and cognitive weakness of consumers (Fernandes et al., 2014; Dholakia, 2015).

H3 was accepted, which indicated that AI-based marketing activities had an adverse influence on ethical attitude in consumers. This implies that exposure to messages created by algorithms, in particular, messages that seem to be manipulative or untransparent lowers consumer trust and appraisal of fairness (Floridi et al., 2018; Hoffman et al., 2014). The results correspond to the accumulating body of literature on AI ethics, where the focus is on issues related to the lack of transparency in algorithms, privacy, and justice in digital marketing (Binns et al., 2018; Zuboff, 2019). Perceptions of unethical conduct on the part of the consumers can lead to the erosion of long-term trust and brand loyalty which prove the significance of transparency and accountability in AI-driven marketing efforts.

The findings are all in line with the coherent conceptual framework in this research. The impact of AI driven marketing practices has a two-sided effect: on the one hand, they are effective in achieving the attention and behavioral appeal of consumers; but on the other hand, on the psychological, financial, and ethical risks. The research proves that psychological manipulation is a major mediating factor that defines the relationship between AI-based marketing and financial vulnerability. The result is added to the body of literature to demonstrate empirically that AI marketing practices affect consumer outcomes in a measurable way to go beyond the purely theoretical discussions.

Furthermore, the adverse impact of AI-powered marketing on ethical perception points to the need of encouraging ethical standards during the development of AI-powered marketing systems by organizations. Harm reduction can be achieved by improving transparency in how data is used, adopting fair targeting, and creating responsible algorithm designs (Martin, 2019; Noble, 2018). Practically speaking, companies ought to keep track of and analyze the psychological and economic consequences of their AI marketing, particularly to the disproportionately vulnerable consumer groups.

Drawing a conclusion, the findings of the study will allow having a comprehensive picture of the dark side of AI-driven marketing. They exemplify that, even though AI technologies are beneficial in increasing the efficiency and customization in marketing, they may also influence psychological manipulation, financial

vulnerability, and reduced ethical perceptions. These findings highlight a necessity to have a balance between marketing performance and consumer well-being, and this implies both regulatory and well-intentioned business activity.

PRACTICAL IMPLICATIONS

The research results of this paper have important practical implications to the marketer, policymakers and organizations using AI based marketing strategies. To start with, it is important that marketers are aware of the fact that highly personalized and targeted AI marketing, though effective in terms of consumer engagement, will inevitably result in psychological manipulation. Ethical principles in design should be embraced by firms to create a balance between persuasive and consumer-autonomous persuasive power so that marketing strategies do not take into account cognitive or emotional weaknesses. Second, companies are advised to employ surveillance systems to monitor the financial effects of AI-based marketing on consumers, and more specifically those who are likely to be susceptible to impulse buying or financial strain. Such a proactive solution can help avoid a negative reputational image in the long term and build a long-term relationship with consumers. Lastly, the analysis emphasizes the need to be more transparent and accountable in AI systems. Offering transparent information on data collection, automatic decision-making, and personalization principles, organizations will be able to increase consumer trust and reduce the negative attitude towards fairness and ethicality. On the whole, these conclusions are a viable guide to the application of responsible AI marketing behavior that can facilitate business goals and consumer interests.

CONCLUSION

This paper has investigated the evil side of artificial intelligence-driven marketing through the psychological, economic, and ethical effects of AI on the consumer. The results prove that AI-based marketing activities contribute greatly to the extent of psychological manipulation that consequently heightens the financial vulnerability of consumers. Also, AI-based marketing has an adverse effect on ethical perceptions of consumers, decreasing the levels of trust and fairness in digital marketing environments. The mediation analysis indicated that psychological manipulation is one of the most important processes between AI marketing and financial vulnerability and the need to comprehend the human aspects of algorithmic personalization.

These findings provide significant theoretical and practical implications. In theory, the study further expands on the current body of research in digital marketing and consumer psychology by providing empirical support through the connection of AI-based marketing behavior to quantifiable behavioral and ethical consequences. In practice, the results highlighted the importance of organizations to adopt responsible AI marketing, whose marketing does not lie in transparency, fairness, and accountability, and is less likely to exploit the vulnerabilities of consumers.

In a nutshell, although AI marketing has the opportunities of making the marketing process more personalized and engaging, it also presents considerable risks that should be addressed with caution. Further studies are yet to be conducted on the long-term implications of AI marketing, moderate additional forces like consumer literacy and personality, and research interventions to ensure that consumers are not overly manipulated. In general, this paper will add to the realization of the dual effect of AI-driven marketing and insights in the further research of scholars, marketers, and policy-makers to find a compromise between innovation and consumer protection.

RECOMMENDATIONS

Resting on the findings of the study, it is possible to offer a number of recommendations to researchers and practitioners. To marketers and organizations, ethical AI marketing principles should be adopted, which emphasize on transparency, equity, and accountability. The methods of obtaining an informed consent to gather the data, labeling personalized advertisements clearly, and frequently auditing the algorithmic results can help to decrease the manipulation of consumer psychology and make it more trustful. Law regulators and governments ought to come up with legal frameworks that would oversee the use of AI in marketing and ensure that financially disadvantaged consumers are not exploited by it. To the researchers, longitudinal studies and experimental interventions should be considered in the future to have a better insight on causality into the relationships of AI marketing and consumer consequences. Also, it is possible to add moderating variables like consumer knowledge, digital literacy, or cultural background to the analysis to gain a more detailed picture of the most vulnerable categories of consumers to manipulation and financial exploitation. Last but not least, there is a call to have interdisciplinary cooperation between the marketing, psychology, and ethics scholars to come up with all-inclusive guidelines of responsible AI deployment. The proposed recommendations will serve to balance the marketing effectiveness and consumer interest towards the sustainable and ethical business conduct in digital world.

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