

Unethical Marketing Practices in Social Media: Impact on Children and Adolescents

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Abstract: *Social media, a widely used communication platform, has significant implications, especially for children and adolescents. This literature review examines the unethical marketing practices in social media and their harmful effects on younger audiences. The study highlights the exposure of youth to inappropriate content, privacy invasions, and unhealthy dietary influences through targeted advertising. The review also discusses the ethical concerns surrounding the use of artificial intelligence in marketing. The paper calls for stricter regulations, further research, and enhanced transparency to mitigate these negative impacts.*

Keywords: social media, marketing, social media marketing, digital, ethics, digital ethics, targeted advertising, children and adolescents, artificial intelligence

1. Introduction

Social media is an extensive communication tool that delivers various messages through various methods of service (Radesky et al., 2019). Adults, children, and adolescents utilize these devices and services (Radesky et al.). As younger audiences grow in this digital environment, they are certain to be exposed to harmful materials (Kent et al., 2019) that have massive, negative impacts on their lives and futures (Radesky et al.). Marketers expose the general public, including young audiences, to these products hoping to make more money. According to Jacobson et al (2019), some of their practices are considered unethical or intrusive. To combat this wave of advertisement in an ever-growing digital world, Jacobson et al have studied the effects of advertising on children and adolescents, the response to companies that use digital consumer data, and the adversities of digital marketing. This literature review aims to examine the studied data and draw conclusions surrounding social media marketing targeted toward children.

Digital Marketing

Bozzola et al. (2022) describe the field of digital advertising as unethical. The authors compare data in order to find the information necessary to correctly advise. Bozzola et al. documented 86 studies that meet certain criteria and report a problem caused by social media by searching through 922 studies on social media. The criteria include: it must be a full-length article pertaining to those under 18 years old, it must report a negative impact of using social media, and it must focus on social media as a means of electronic communication. The paper identifies depression, poor diet, cyberbullying, psychological problems, sleep, addiction, anxiety, and sex-related problems as the main negative results of social media usage among people under 18. The authors also find that many of these studies report that COVID-19 negatively impacted each of the problems, exacerbating their presence in children and adolescents due to the increased time spent online. Bozzola et al. conclude by calling for an increase in awareness of the dangers of social media. The authors call for guardians, application developers, marketers, and health practitioners to employ more preventative measures, mainly screen time and media limits.

Radesky et al. (2020) explains children and teenagers are driven to develop harmful behaviors through many different forms of marketing. This includes consumption of unhealthy foods, tobacco products, marijuana, alcohol, the use of indoor tanning, and more. Radesky et al. state that since a person's brain is not typically fully developed until the age of 25, younger audiences can lack critical thinking skills and have a harder time with impulse control, making consumption of appealing products even more likely. Resisting advertising is especially hard for adolescents when it is presented to them in particularly appealing ways. This includes advertising through familiar apps that they commonly use, marketing products next to their favorite celebrities, or even advertising alongside personalized content that they trust and frequently consume. According to the authors, tracking and using these children's digital conduct data only endangers them with the hazards.

Radesky et al. (2020) state that data collection can be traced in many distinct ways:

- use of cookies to record webpage history in a browser;
- histories of interactions with social networks or media by means of liking purchasing, posting, and viewing;
- and finally through apps that are granted permission to use a user's location or contact list.

The paper compares data to find the information necessary to correctly advise on the topic. Their findings include 68 publications reporting on different consequences by searching through multiple studies done about social media use and its consequences. According to the authors, the most popular of these consequences and how many publications reported on them are:

- depression; 19 different publications,
- unhealthy diets; different publications,
- and cyberbullying; different publications.
- Other prominent issues include sleep deprivation, anxiety, and addictions to social media, alcohol, marijuana, and tobacco and electronic cigarettes.

The authors state that all these consequences are important when digital marketing is taken into account. Radesky et al. also state that adolescents being marketed to on social media

are the most vulnerable group of users. The researchers cite the American Academy of Pediatrics' (AAP) policies regarding regulating media usage for parents and families. The AAP puts most of the responsibility in creating a safe, digital environment on policy makers and developers of technology.

Jacobson et al. (2019) research the general public's reaction to social media marketing. They focus in particular on marketing using public data for targeted advertisements, opinion mining, and customer relations. Targeted advertising makes the whole field very individualized by using personal data to make appealing messages and offers. Jacobson et al. say algorithms are utilized by marketers to group consumers together based on user preferences and then deliver advertisements that the group would generally find attractive. They also claim the employment of this method could potentially result in a five to eight fold return on investment of personalized offers. Opinion mining involves tracking patterns and mentions of phrases to maximize a product's effectiveness in audiences. Jacobson et al. explain that marketing campaigns can have predicted results when opinion mining tactics are employed. The authors admit that customer relations are a big part of digital marketing and that social media offers endless potential for improvement of the relationship between marketer and customer. They also note that traditionally, customer relationship management databases retained basic information about consumers' lives. Jacobson et al. claim that data derived from social media is mixing with these traditional databases to acquire more personal details and patterns, which is helped through knowing customers' issues. Additionally, they concede that customers will generally have a better experience when marketed to by businesses using personalized information to reach them. But, Jacobson et al. warn, privacy concerns over marketing tactics continue to grow in the age of the internet and within all of these business practices. This paper focuses specifically on polling people who have at least one public social media account. According to the authors, social media companies create "Shadow profiles" for users who do not have an account on particular platforms, yet have one with public data on another or have contacts that present data about the individual on their own public profiles. This cross-platform targeting method offers even more data for marketers and further scares the general public.

Jacobson et al. (2019) find the idea of targeted advertisements makes the majority of participants uncomfortable by polling 751 adult Canadians with their own public social media accounts. "Marketing comfort" is a term defined here to represent the connection between the consumer's comfort and the marketer's use or avoidance of ethics. Thus, marketing comfort connects back to a user's comfortability with opinion mining, targeted advertising, and customer relations. Because participants report taking into account what they have personally disclosed as public information, Jacobson et al. further conclude that risks and benefits both actively play a role in an individual's marketing comfort level. Using this information, Jacobson et al. find that, despite the fact that this fading wall of privacy has associated risks, users are willing to sacrifice at least a tiny portion of that privacy in order to reap some perceived benefits associated with social media use. Finally, the researchers find that because a large

percentage of consumers are uncomfortable with this form of targeted advertising, the relationships between businesses and customers can suffer. Thus, the researchers advocate for further research to discover more ethical approaches to this field to comfort the general public and to uphold the relationships between the companies and their consumers. They indicate that these approaches could include encouraging companies to be more open about their uses of data mining and reassure the concerns of the public. Jacobson et al. also say that in the future, research should include more thought put into people's comfort with specific social media platforms, which all have different motives, and also include research about people's comfort when personalized factors of individuals are taken into account, mainly culture, gender, and trust.

Kent et al. (2019) describe how social media even impacts the diets of children and adolescents. In this study, 101 children (aged 7-11) and adolescents (aged 12-16) completed a survey regarding their usage of social media and also had a total of 10 minutes recorded while they spent time on their two favorite apps on their own devices. The researchers chose an allotted time of 10 minutes to ease the burden of participation for the children and adolescents and so that researchers could thoroughly review each minute of social media use without being overwhelmed with data. Each participant wore Tobii Pro Glasses, which records the field of vision of the user. The purpose of all of this was to discover the frequency and intensity of exposure to food marketing on children and adolescents through social media. The researchers counted exposure as food advertisements, either in still images or video advertisements, user-generated content; as in the intentional or unintentional promotion of a food product or brand, celebrity-generated content; content more specifically from influencers through having at least 10,000 followers, and food marketing within other content found on the web, like brands or products depicted in streamed videos or television shows. The researchers reviewing the footage even counted quick flashes of a product when a participant scrolled past as well as times when they watched a whole video with a logo shown throughout. Through these guidelines, they measured the time in minutes and seconds of how often children and adolescents were exposed to such conditions. Researchers also kept track of whether the indicated exposures on screen promoted a product or just a brand and categorized the food marketing exposure as such. The study also tracked other factors such as food company and food category. Some of the food categories accounted for included snacks, cookies, sugar-sweetened beverages, alcohol, tea or coffee, fast food restaurants, non fast food restaurants, yogurt, cheese, supermarket, food delivery company, and a variety of other categories. Researchers collected the energy and nutritional content of every product promoted, save for alcohol. 95% of children used YouTube, 29% used Instagram, and 13% used Snapchat. Facebook and Twitter were also observed, but few children and adolescents accessed those applications. Additionally, 64% of adolescents spent time on Instagram, 57% on Snapchat, and 46% on Youtube. Finally, 72% of participants were exposed to some form of food marketing within their 10-minute period.

Kent et al. (2019) claim that the participants often saw more exposure through products rather than brands. Marketing

exposure of fast food made up 27% of marketing exposure towards children, followed by sugar-sweetened beverages at 10% and candy or chocolate also at 10%. Company-wise, McDonald's made up 14% of marketing exposures, Starbucks made up 10%, as did General Mills. Among adolescents, fast food made up 50%, sugar-sweetened beverages made up 9%, and snacks made up 6%. McDonald's made up 16%, Starbucks made up 13%, and PepsiCo made up 9%. Researchers collected the energy and nutritional content of every product promoted, save for alcohol. The study then brought in a registered dietitian, Elise Pauzé, who concluded that the vast majority of products exposed to children and adolescents are unhealthy by the standards of the Pan American Health Organization Nutrient Profile Model and the UK Nutrient Profile Model. The researchers continue to state the abundance of food marketing exposure that adolescents especially view and say that laws and restrictions surrounding unhealthy food marketing to children and adolescents should also be applied to the digital world.

Coates et al. (2019) also dive into the influence of social media on children's diets. 178 participants from ages 9 to 11 were recruited to take part in the experiment without incentive and without knowledge of what was actually being tested. Participants were then evenly assigned to one of three marketing groups: healthy food, unhealthy food, or nonfood. Two of the most famous YouTube vloggers in the United Kingdom were chosen for the following experiment. According to Coates et al., because consumers respond differently to sex, both a male and a female vlogger were chosen to make fake Instagram profiles. On these profiles were 3 test images and 3 filler images of the influencer with a product in hand. While the filler images included unbranded nonfood items (such as sneakers) the test images included unhealthy products, healthy products, or the unbranded nonfood items as a control. The participants were isolated in their own rooms and completed a hunger test and were then told to view and pay close attention to the profiles for two minutes as there would be a test on it afterwards. The children were then able to eat as many or as few snacks as they wanted in ten minutes, with the weight of the remaining snacks after the ten minutes being recorded. Coates et al. found that children consumed 26% more kilocalories (kcal) when exposed to the unhealthy marketing as opposed to the control group and 15% more kcal in comparison to the healthy marketing group. Similarly, children consumed 32% more kcal from unhealthy snacks when exposed to the unhealthy marketing as opposed to the control group and 20% more kcal from unhealthy snacks in comparison to the healthy marketing group. Coates et al. conclude that while there is correlation between advertisement and unhealthy eating, it is not necessarily causation.

Simplício (2019) describes how digital marketing has even been an effective form of advertising dentistry in Brazil. The author, a dentist himself, draws a fine line between what they believe is ethical versus unethical when it comes to this. Simplício defines ethics as a selection of principles and values collected to bring harmony and respect to any interaction between people and their differing ideologies that favor the community as a whole, disregarding personal interests. The paper claims that the practice of advertising dentistry on social media has become less about health care and more

focused on cosmetics. Simplício states it has become an extension of the epidemic of aestheticism, which is primarily prevalent in adolescents. The paper specifically attacks the use of clinical images, such as before and after procedure pictures, and the possible repercussions for dentists that market in that manner. According to Simplício, the Brazilian Code of Consumer Protection (CDC) protects consumers against subliminal advertising, advertisements that do not make it clear they are marketing, deceptive advertising, advertisements that mislead price, quality, quantity, and other important factors in marketing, and abusive advertising, advertisements that promote potentially harmful or damaging treatments. Violations of these protections result in fines and jail time. Simplício discusses the overabundance of dentists in Brazil from 2010 to 2019 claiming that this results in more competition among dentists. Simplício claims that the clinical before and after images advertised on social media can typically wind up violating the regulations set by the CDC and often result in legal battles that result in the defending dentists suffering the ramifications. Yet, the increased competition amongst dentists only further beckons this form of advertising. Thus, Simplício claims that his peers employ these methods as a high risk, high reward scenario. Simplício also concludes that because there is so much emphasis on aesthetics in the youth's culture, it is adolescents who are harmed the most from these misleading advertisements.

Future of the Marketer: Artificial Intelligence

Liu et al. (2021) write a paper centered around the enhancement of social media marketing in the healthcare industry through artificial intelligence (AI). The paper mentions the overall positive effect that AI has had on digital marketing, such as offering platforms for physicians, public health workers, and laypeople to learn health knowledge. Liu et al. also state that patients will often communicate with each other on platforms such as Twitter to gain information about their ailments. AI can thus enhance digital health communication as a form of marketing by offering ways to screen, detect, and predict possible problems and solutions for patients. While researchers have reached these goals and are ever-refining them, Liu et al. claim that there are arising ethical concerns related to the use of AI in this field. The authors intend to ease the worries of shareholders by examining the use of responsible AI in the digital health industry by analyzing 25 interviews with healthcare professionals. Liu et al. claim that based on the interviews, professionals are in favor of using ethical AI principles to set up the healthcare industry for improved success in social media marketing to consumers. The authors define ethical AI principles to be centered around fairness and security in addition to transparency and accountability. Liu et al. claim that if these principles are followed, then the healthcare industry's social media marketing will be vastly refined and ease shareholders' concerns.

Singh et al. (2023) continue with the perspective of AI use in social media marketing. Singh et al. describe one of AI's main goals in this field is to predict and respond. More specifically, the AI practices machine learning techniques that are able to make responses sound natural when replying to a question, comment, or concern of a consumer. The authors also claim that another goal of the AI is to help group customers together in instances where applicable to further improve the applied

industry. Twitter, Facebook, Instagram, and LinkedIn all use AI to refine their external as well as their internal marketing services, with LinkedIn using AI to internally market to connect employers with future employees.

2. Conclusion

Children and adolescents using social media is a divisive topic, due to all of the potential consequences of devoting a big portion of time to it (Bozzola et al., 2019). Because businesses take advantage of social media usage, Jacobson et al. (2019) show that many people disapprove of these business practices. Radesky et al. (2019) discusses the differences in forms of marketing as well as the possible repercussions of social media marketing, such as changes in diet. Changes in diet, among other things, is a major concern as indicated by Kent et al. (2019) and Coates et al. (2019). Another concern about digital marketing is brought up by Simplício (2019) who believes that the dentist industry is suffering greatly in Brazil because of it. Lastly, the use of artificial intelligence both in the present and the future is brought up to discuss where the industry is headed (Liu et al., 2021; Singh et al., 2023). This study is significant as it sheds light on the growing concerns of digital ethics and the wellbeing of vulnerable populations, particularly children and adolescents, in an increasingly digital world. Understanding these impacts is crucial for developing effective regulations and ethical standards. It is important for the general public to be properly informed about the topic and while there is available data regarding the subject, further research can vastly improve the world's understanding of the subject.

3. Limitations of Current Research

Future research for this project should include study of the long-term effects of advertising to children and adolescents on social media, with a focus on the effects on mental and physical health. More thought regarding regulation of advertising targeted to children and adolescents through social media, is recommended so that lawmakers can properly weigh every option available. Additional data should be collected regarding brand recognition amongst children and adolescents as another useful tool in finding out the effectiveness of social media marketing. The study done by Liu et al. focused on the use of responsible AI in health marketing on social media, which leaves room for research to be done in other marketing industries: law, retail, or food. Additional research, similar to the study done by Coatesdone Coates et al. (2019) about social media effects on diets, is also recommended, for the other topics mentioned by Bozzola et al., such as sleep, addiction, depression, and cyberbullying. However, these topics would be very difficult to ethically measure and thus this recommendation should be taken with a grain of salt.

Project Direction

The accessibility of companies and advertising in the digital world needs more rules and regulation (Jacobson et al., 2019). To do this, my project has a couple of different directions it can go. Firstly, I could find a specific company and product to zero in on and examine their own uses of social media advertising. From this, I could reach my own conclusions about whether or not these methods are ethical, based on

previously established criteria. Secondly, I could go to a local business and offer to run my own, ethical advertisement campaign on social media and examine the results of the experiment. Such an experiment could allow me to make sense of the results surrounding the effectiveness or ineffectiveness of the various authors' conclusions. Lastly, I could make informative materials that detail the effects of social media advertising and make these available to companies interested in investing money in that field. I can also create materials for parents who need to be made aware of the potential consequences of social media use in order to protect their children. While this method does not employ any research, it focuses on helping to improve the world. Children and adolescents are being harmed every minute they spend on social media which unfortunately happens to be a large portion of time.

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