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Master's Degree Program in
Data-Driven Marketing

Manipulative Marketing Strategies of Junk Food

How Ads Target and Influence Youth

Toufiq Hossain

Master Thesis

presented as partial requirement for obtaining a Master's Degree in Data-Driven Marketing

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

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by

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Master Thesis presented as partial requirement for obtaining the Master's degree in Data-Driven Marketing, with a specialization in Digital Marketing and Analytics

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Statement of Integrity

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism, any form of undue use of information or falsification of results along the process leading to its elaboration. I further declare that I have fully acknowledged the Rules of Conduct and Code of Honor from the NOVA Information Management School.

[Lisbon, 30/10/2025]

Toufiq Hossain

Contents

Abstract.....	4
2 Literature review.....	8
2.1 Overview of junk food marketing techniques.....	8
2.2 AIDA MODEL	10
3 Research model.....	13
3.1 Hypothesis development	13
4 Method	17
4.1 Measurement.....	17
4.2 Data	17
5. Results	18
5.1 Measurement Model Evaluation	18
5.2 Structural Model Evaluation	19
6 Discussion.....	21
6.1 Theoretical Implication	21
6.2 Practical Implication.....	24
6.3 Limitations of Future Research	25
7. Conclusion.....	26
References	27
Appendix A - Questionnaire items	31
Appendix B - PLS loadings and cross-loading.....	32
Appendix C - Heterotrait-Monotrait Ratio of correlations (HTMT)	33
Appendix D – Ethics Committee	33

Abstract

Overweight and obesity, a global health crisis affecting one in eight people, is significantly influenced by junk food consumption. It is often fueled by manipulative marketing tactics. While alcohol and tobacco advertising face strict regulations, junk food marketing remains largely unregulated, despite its detrimental health impact. This study focuses on the under-researched youth group, exploring how advertising AIDA (attention, interest, desire and action), including psychological triggers, emotional rewards, influence junk food consumption and contribute to long-term health problems. The research also emphasizes regulatory deficiencies, such as the lack of health warnings and advertising restrictions for older teens. The study surveyed 201 participants from Bangladesh and Portugal and found that psychological persuasion, interest, and promotional tactics significantly influenced consumption behavior, while regulation played a moderating role. Ultimately, the study shows how junk food marketing actually contributes on youth consumption alongside with few moderators that regulate the behavior.

Keywords: Junk food advertising; fast food promotion; food consumption behavior; junk food marketing tactics; health risks of junk foods; unethical practices.

Sustainable Development Goals (SDG):



1. Introduction

Overweight is a condition where the body stores excessive fat. In 2022, 1 in 8 people in the world were found to be living with obesity (World Health Organization, 2024). It is known that Childhood and adolescent overweight increases the risk of early noncommunicable diseases like diabetes and heart conditions. One of the main reasons for being overweight is consumption of Junk food. And promotion of junk foods definitely drives a big role regarding the increase consumption of this specific low nutritious foods that are harmful for the body. Individuals' eating habits, although frequently characterized as a matter of personal choice, are influenced to a large extent by food environments including marketing (World Health Organization, 2016).

AIDA (attention, interest, desire and action) model is an advertisement guidance that was invented by Elmo Lewis in 1898. AIDA Stands for attention, interest, desire and action. The AIDA model Identifies the cognitive stages and to some extent emotional stages, which an individual goes through during the buying process ((Lewis, 1908; Lewis & Elmo, 1899). Since, Advertising is a crucial part for Junk food marketing as well, hence, it is followed as a guidebook in a lot of the advertisement designs. While on the other hand, Food specially Junk food is very popular among youth and while designing junk food advertisement campaigns as well, AIDA is followed as most advertisement have elements that is followed by the 4 components of AIDA model. As carried away by these strategies, people buy junk foods, hence it can be said that there is a significant influence of this model on the buying consumption behavior specially for the youth.

While strategizing marketing formation, companies have to abide by certain rules and regulation for certain products. For instance, regarding marketing of Alcohol goods, the most effective way to control marketing is through legal measures regulating content and volume (World Health Organization, 2024). The restrictions are so directive in certain regions that it is strictly prohibited to portray drinking as desirable or healthy, or associating it with sexual success (Purves et al., 2022). The reason behind these restrictions is simple, brands cannot make fake promises, because, it is proven that Alcohol is bad for health.

However, when it comes to Junk food promotions, the restrictions are much more flexible whereas the damage that are caused by the consumptions are nowhere to be neglected. In respect to consumption, marketing plays a vital role in the industry of junk food since marketers can play around with a lot of elements including psychology, different mediums, tactics, 4p's and so on. The messages the brands promote whether in traditional media or digital media irrespective of the medium, influences the youth massively including teens. Marketing has contributed to framing unhealthy foods with appealing imagery and branding while eluding its poor nutritional content(Ertz & Le Bouhart, 2022). The psychology of food marketing has greater impacts on people than just to have an ignition of short-term craving. It shapes up the lifestyle, it influences the buying and consumption behavior and obviously long-term attitude towards food. Children obesity and overweight is, therefore, a critical issue to which marketing has contributed in a significant way by influencing children's attitudes toward food and their food choices (Castronuovo et al., 2021).

There are some restrictions for the junk foods to be promoted to children. The World Health Organization has called for government regulations to restrict food and beverage marketing to

children (including adolescents up to age 17) as a global health priority for preventing noncommunicable diseases (World Health organization, 2010). A recent article from *The Guardian* highlights the UK's decision to ban junk food TV ads before 9 p.m. starting in October 2025. However, this is just one step, and far more needs to be done globally to protect younger audiences from the harmful impact of junk food marketing. The youth aged 15-24 are also in a vulnerable position and the matter is often overlooked. This age of children covered by self-regulation presents one of the most problematic loopholes; existing policies do not cover adolescents above age 11 or 12 (Harris et al., 2022). In the same journal, providing three examples of brand's tagline, it was stated that instead of rational arguments, Brands' associate emotional rewards like "Open Happiness" (sugary soda), "You're Not You When You're Hungry" (candy bar), and "Win from Within" (sports drink).

Rules and regulations of marketing should be justified for all sorts of products. A huge automobile company was fined 2.8B Dollars because they claimed "Their diesel cars were environmentally friendly"(Fitzgerald & Spencer, 2020); A top Asian cosmetic brand leader had to rebrand their brand from "Fair and Lovely" to "Glow and lovely" due to criticism (Nadeem, 2014) . If false marketing is punishable, why this is not true for every product?

The main research gap of the previous research was that they mostly focused the impact of junk food marketing on the children (Vergeer et al., 2025; Potvin Kent et al., 2024). There are not many researchers have mentioned that the impact of junk food marketing on the youth as well. In the alcohol and tobacco goods, it is at least written that it is harmful for the body. But in the advertisements of junk food, very few guidelines indicate the necessity to brought up the fact that this is harmful. In Some products, there are nutrition scale tagged that help people to understand whether that is healthy or not. But this is not followed by a big chunk of people in the marketing industry as well. Moreover, companies drive the customers with different innovative marketing channels and strategies.

In this research, identifying those channels and strategies and the impact of that on youth also have been highlighted Below is the research question (RQ), that are tapped in this research. RQ: How do manipulative marketing strategies, including the AIDA model and psychological persuasion, influence youth consumption behavior in junk food advertising?

While most studies show the impact of Junk food advertisement on children, there is a big loophole because youth aged 15-24 are also exposed to the advertising strategies of junk food across many platforms. Emotionally charged advertisements, coupled with the absence of clear regulatory enforcement in many countries, raises concerns about the ethical dimension of marketing targeted at youth. Exploration of Manipulative strategies – framed through the AIDA Model (Attention, Interest, Desire, Action), alongside with psychological persuasion techniques and the regulatory awareness is the main motivation of the study. Therefore, the objective refers to analyzing how these independent constructs influence the dependent variable: Youth consumption behavior, by applying established advertising and behavioral theories within a quantitative framework.

Several valuable contributions are offered by this research. To begin with, it expands the academic understanding of how young people respond to junk food advertising by applying the Aida model is a notable contribution to the study. With the inclusion of psychological triggers and awareness of the regulation, provides a broader view of how marketing influences behavior. The study also briefly delivers cross cultural insight through responses from youth in both Bangladesh and Portugal – highlighting pattern that may differ across regions. From the perspective of a marketer and policy makers, the findings can definitely be useful while designing better strategies that are more ethical and youth-conscious. The research also enlightens regarding the ongoing debate between ethical concerns of targeting vulnerable age groups with manipulative advertising.

2. Literature review

2.1 Overview of junk food marketing techniques

There are lots of media and strategies that are implemented by the marketing industry regarding fast food promotion that influence youth a lot as well. The marketing implements psychological triggers and emotional appeals that shape preferences and lifestyle choices greatly. For instance, Ertz & Le Bouhart (2022) argue that junk food advertisements often focus on appealing imagery and branding to mask poor nutritional content, thereby influencing long-term attitudes toward food.

In regards to the quick advancement in communication technologies, several social media sites have emerged in recent years that prompted marketing practitioners to take advantage of them for interacting, communicating, and collaborating with their customers conveniently (Chhonker, 2018). Except for social media as well, much literature focuses largely on other channels like brand websites, apps primarily analyzing the visible marketing elements and appeals within the marketing (Mulcahy et al., 2022; Jaichuen et al., 2019). Marketing practitioners have observed that consumers are increasingly comfortable using internet channels and social media platforms to connect with one another. As a result, many service providers have established their own pages on these networks to engage with customers online and build positive brand perceptions (Hutter, 2013). There is also evidence of influencer marketing as well, where local and international influencers associate or place products in their content to persuade consumers more.

In terms of vulnerability, adolescents and young adults are likely to be influenced more due to their growth stage of mind. Teenagers are much more impulsive and responsive towards emotional and social messages in advertising (C. Pechmann et al., 2005). Since, they are still on the early stage of developing the cognitive control, it makes them more likely to internalize the messages and associate them with the social identity. Repeated exposure to junk food advertising among youth increases brand loyalty and unhealthy eating habits over time (Harris et al., 2022).

The literature is clear that multinational junk food companies exploit manipulative marketing strategies including gifts, enticing products and characters to reach youth, particularly in LMICs. These are heavily marketed on social media and have been linked to the increased prevalence of unhealthy dietary practices in childhood obesity (Bankole et al., 2023). New evidence suggests that digital media are now being utilized by fast food companies, using persuasive methods such as influencer marketing, advergames, and youth-oriented branding to shape the eating habits of adolescents (N. H. Nazlan et al., 2024). This focused advertising plays a part in the increased fast-food intake and its associated health problems among urban youth in developing countries such as Bangladesh (Ahmed, 2025). Marketing of harmful substances like alcohol and tobacco has much tighter rules and regulations to be followed. For instance, alcohol advertisements are often required to avoid associating their products with success, desirability, or positive emotions (Purves et al., 2022).

Likewise, apart from the food or alcohol industries as well, companies have been penalized for promoting messages that are not valid in general. For instance, a \$2.8 billion fine was imposed on an automobile company for misleading environmental claims (Fitzgerald & Spencer, 2020). These

examples underscore the need for comprehensive and enforceable regulations in the junk food industry. By implementing similar restrictions, policymakers can help mitigate the influence of unethical marketing practices on youth consumption behaviors. Research has found that junk food commercials feature heavily in major sports programming, subliminally reinforcing consumption habits. On the other hand, advertising that includes anti-junk food messages has been shown to decrease purchase intentions for unhealthy foods highlighting the potential of strategic messages effects on youth dietary choices (Hollett et al., 2025). As spoken before a recent article published in the guardian states UK's decision to ban junk food TV ads before 9 p.m. to protect the welfare of children. There is increasing evidence that children who are often exposed to unhealthy food marketing on the internet and through digital marketing techniques such as using Twitter, Facebook, or smartphone apps to spread the word about unhealthy food brands are more likely to eat at fast food restaurants, drink sugary drinks, and snack on candy and chips, say health researchers. Whilst the exposure of children with high screen time, particularly to digital advertising, emphasizes the pressing nature of policy action to shield young people from exploitative digital food marketing (Vergeer et al., 2024).

The relationship between junk food consumption and public health has been demonstrated clearly in past literature. The World Health Organization (WHO, 2016) stated that food environments, consisting of marketing and branding, drive eating habits of individuals greatly. Among the major drivers, one of the most significant ones is junk food marketing in particular, as it drives the consumption of low-nutrition, calorie-dense foods, which contributes to rising obesity rates globally (Ertz & Le Bouhart, 2022). Junk food advertisements promote unhealthy eating products, framing them as attractive, delicious, and social as well. The influence is mostly present among children and youth, where marketing significantly influences consumption patterns (Castronuovo et al., 2021). Research shows that junk food advertisements often fail to disclose the long-term health implications of consumption, creating a disconnect between marketing messages and reality (Fitzgerald & Spencer, 2020). Obesity and overweight often turn individuals into victims of non-communicable diseases.

Psychological triggers play a central role in junk food marketing strategies. Ertz and Le Bouhart (2022) emphasize how brands leverage emotional appeals and rewards in their advertisements, linking junk food to feelings of happiness, success, or self-reward. Well-known campaigns such as “Open Happiness” (soft drinks) and “You’re Not You When You’re Hungry” (candy bars) evoke strong emotional responses, particularly among youth, making these products more attractive while diverting attention from their nutritional shortcomings. This form of emotional branding not only stimulates short-term cravings but also influences long-term attitudes and eating behaviors. Research has shown that repeated exposure to such messages during adolescence contributes to the development of unhealthy eating habits that can persist into adulthood (Bankole et al., 2023). The subtle yet impactful psychological techniques used in junk food advertising often obscure the distinction between promoting a product and safeguarding consumer health.

While much research has examined the impact of junk food marketing on children, there is still limited focus on its effect on older youth (ages 15–24). This group, often referred to as “emerging adults”, is particularly vulnerable due to their growing independence and increased spending power. Unlike younger children, adolescents and young adults are less shielded by current

regulations, making them more susceptible to the persuasive techniques used in junk food marketing (Harris et al., 2021). This study aims to address this gap by investigating how marketing strategies specifically target and influence youth behavior. By exploring the psychological triggers, emotional appeals, and regulatory gaps that affect this age group, the research seeks to provide a deeper understanding of the relationship between junk food marketing and public health.

2.2 AIDA MODEL

The AIDA model (Attention, Interest, Desire, Action) is a consumer behavior model used to understand how advertisements influence consumers through a series of activities. The AIDA model, is known to be a major theory of advertising and communication, often used to understand the whole process from the psychological behavior of an individual, to the effect of marketing communication, to the consumption behavior resulting from the media (Song, 2021).

The first step in influencing consumer behavior is to capture their attention, as it sets the foundation for engagement with the marketing message (Rakwach, 2022). This is the primary phase where capturing the audiences focus is the main objective. Advertisers use the attention feature in every communication such as catchy jingles, vibrant visuals, good packaging, even in humorous hooks as well. Whether in traditional TVC or a short reel in a digital marketing aspect, or even a static content, Marketers give high priority to this step and specially for fast food advertisement since people will not pay attention unless they find the return of the money they are spending over the food. Even in branding logos as well, there is a reason why McDonalds, KFC decided to go for vibrant colors instead of dull colors just so that they can grab the attention. an effective advertisement is an advertisement that get attention and is remembered, and make people do purchasing actions (Shimp, 2000).

Interest is developed once the consumer's attention is captured, allowing them to process and relate to the message on a personal level (Rakwach, 2022). The second component of AIDA model – Interest, offers or new product launches, testimonials, marketing campaigns anything that gives customers the interest to be aligned furthermore. For instance, Mcdonalds offer kid's meal dedicated to kids with the objective of capturing the interest of the kids. Interactive marketing campaigns can also be a good example of growing interest. For instance, Selfie campaigns, even when we go and buy fast food from self-ordering screens, that too can be considered as a part of enhancing the “interest feature”.

In the third part, Desire, Marketers try everything so that they can grow the desire or the want to have the good consumed by the customers via relevant means. (Kotler & Armstrong, 2015) explained that creating desire involves highlighting how the product satisfies deep emotional needs or aspirations, pushing the consumer closer to making a choice. Marketers in this phase try to grow the desire of the customers so that they can feel the need to own the good/service. It can happen via different means such as marketers can associate emotional means with the product, they can implement psychological triggers like “Got milk” Campaign that convince you to engage on growing the need. The “I’m Lovin’ It” slogan is not just about taste; it’s about associating the brand with enjoyable moments. Similarly, fast food commercials often feature groups of friends sharing meals, children enjoying Happy Meals, or families bonding over dinner, reinforcing the

idea that their food is part of life's happiest experiences. Psychological triggers, such as scarcity marketing (limited-time menu items) or guilt-free indulgence ("You deserve a treat!"), further strengthen consumer desire, pushing them closer to making a purchase.

Finally, in the Action phase, the goal is to convert this built-up desire into a purchase decision. Marketers encourage consumers to act immediately through strategic nudges like limited-time offers, loyalty programs, and seamless ordering experiences. Fill and Turnbull (2016) argue that effective advertising must end with a strong call to action that simplifies the consumer's next step, translating motivation into immediate consumption (Fill, 2016). Fast food chains remove as many barriers as possible between the consumer's craving and the actual purchase. Digital transformation has made this easier—one-click ordering through mobile apps, personalized deals via push notifications, and gamified reward systems make buying fast food effortless and rewarding. Call-to-action messages such as "Order Now," "Limited Time Offer," or "Get Yours Before It's Gone!" create a sense of urgency, prompting impulse purchases. Additionally, technology has streamlined the process—QR codes in ads, social media integrations where users can swipe up to order, and even AI-powered drive-thru ordering make acting on these cravings as easy as possible.

Social media influencers profoundly affect young people's dietary behaviors by attracting attention, interest and desire using persuasive communication in relation to the AIDA model. While sponsorship disclosure may erode trust, a considerable proportion of young individuals particularly males still adhere to influencer-promoted dietary advice, emphasizing the potential influence influencer marketing experts on food decisions (Wong et al., 2024). Digital marketing tactics, such as social and content marketing, can greatly increase consumer awareness and engagement by delivering content that is targeted and personalized across the customers' journey. These tactics stoke interest, desire and action among young people, exemplifying how junk food companies use digital platform to make consumption patterns (Sarfraz et al., 2025). For instance, Capturing Attention, Marks the initial and most critical stage of the AIDA Model, it is mostly achieved through visual engaging contents and strategic influencer collaborations on social media platforms (Maitri et al., 2023). After the attention, the model progresses to interest that is sustained through AI-driven content personalization aligning marketing messages with individual consumer preferences enhancing relevance and engagement (Sodiq Odetunde Babatunde et al., 2024).

The applicability of AIDA Model continues to be strong across all various domains of modern marketing, mostly in youth-focused digital environments. For instance, a recent study demonstrates how influencer marketing and online reviews guide customers through AIDA stages in terms to purchase – starting with capturing attention via visual cues to prompting action thorough credibility and social proof (N. H. Nazlan et al., 2024). Not only this, Studies on digital advertising also shows that AIDA's sequential stages continue to explain how persuasive cues such as personalization, storytelling and emotional design stimulate desire and lead to action (Anjos et al., 2022). The model seems to have been used in retail and e-commerce context as well regarding analyzing how website design, product presentation, and interactivity affect consumer attention, engagement, and purchase intention (Oktiani et al., 2022). Not only on the dedicated field, the applicability of AIDA model in structuring online campaigns have been demonstrated that combined attention-grabbing visuals with clear call to actions (Dwivedi et al., 2021). These

studies have reaffirmed that AIDA remains a robust and adaptable model for understanding persuasive marketing dynamics – particularly in youth targeted and digitally mediated brand communication.

3. Research model

The figure 1 below show the research model indicating the relationship between independent variables and the moderators in regards to consumption behavior. A research hypothesis is an assumption that predicts the relationship between variables in a study. By using the AIDA model, this research develops hypotheses to explore how exposure to junk food advertisements impacts youth consumption behavior. Using a survey as a basis for analysis, this study will validate the AIDA model using empirical methods, spoofed out using statistical techniques, including correlation matrices. This will allow us to evaluate the strength of the relationships between AIDA stages and junk food consumption behavior. And it will assess how existing regulatory policies moderate this advertising influence. Control variables including age, gender, education, and income were included in the model following (Bernerth & Aguinis, 2016) to account for demographic variation. However, as shown in the PLS analysis (in 5.2.2 section), none of the control variables had statistically significant effects on the dependent variable. The hypotheses are stated as follows:

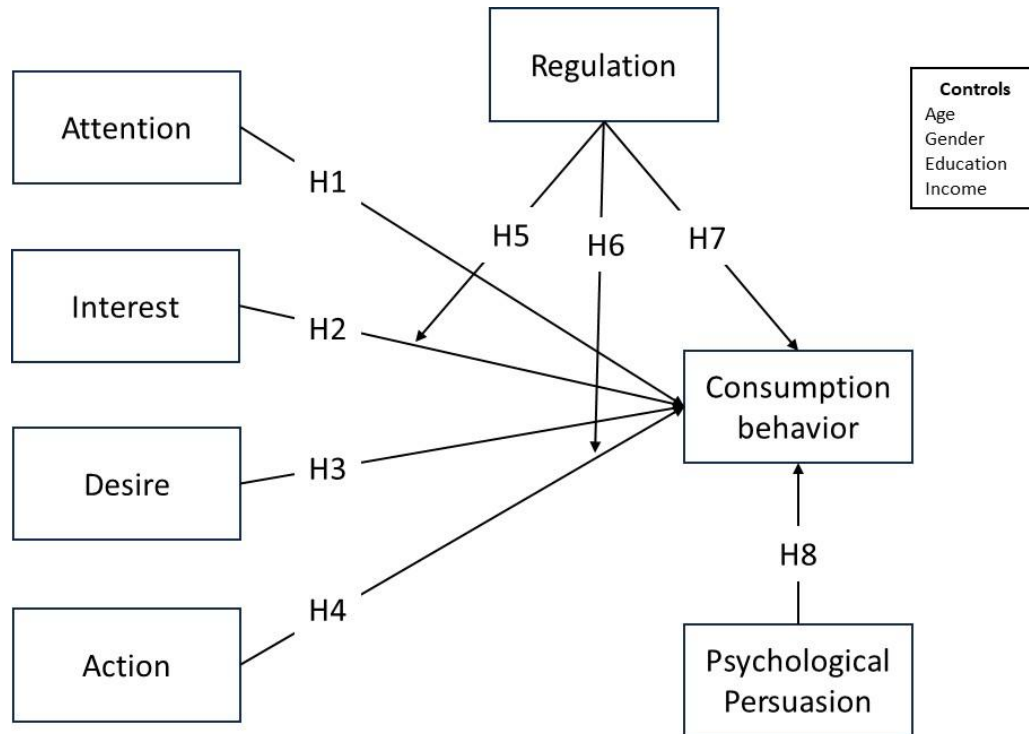


Figure 1 Conceptual Model

3.1 Hypothesis development

Gea and Rahmayati (2024) focused their attention on the place of attention as the first main step toward creating consumer behavior. Attention is essentially the first thing that should be of concern to consumers; it creates an impression. This is consistent with media strategies that develop psychological mechanisms for acquiring attention and imprinting associated fields in audiences (e.g., fun= junk food). Studies indicate that young persons are particularly susceptible to junk food ad campaigns, which are often noticed more than others (Teens Exposed to More Junk Food Ads

Eat More Junk Food, Study Finds, n.d.). Research indicates, for example, that exposure to junk food ads and unhealthy food consumption are related among teenagers. The use of brightly colored and bold visuals in advertisements is purposely aimed at grabbing attention and inciting positive feelings in the viewer; hence ad memorization and engagement. For instance, McDonald's used the colors red and yellow in its branding: those colors, associated with happiness and fun, are purposely used to get attention. Also, placing ads that pair two high-contrasting color combinations, like neon-green text on a black background, intervenes as a hard stop for viewers scrolling through their feeds and invokes an urge to respond emotionally, which makes the experience more engaging and memorable (Media, n.d.). Based on that, we posit:

H1: Attention-grabbing elements (e.g., vibrant visuals, catchy slogans) in junk food advertisements significantly increase youth interest in the advertised products.

The model reflects the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986): possessing interest makes source engagement and associative reasoning through a message deeper and more persuasive. It follows that increase desire through central route processing by prolonged exposure to interesting media (e.g., limited-time offers or interactive campaigns). Research reveals that advertising bad food to children plays a positive role in increasing their consumption and attitude towards that product. That is, the promotional content can arouse curiosity among children for the advertised food (Smith et al., 2019). Engaging advertising wakes up the customers' interest, bringing them toward full content. These ads aid kids in identifying a product through a picture, and the more appealing the ad, the more successful it is. Junk food information called out to me when it was being advertised. Innocent children are open and are generally unaware of the things placed in front of them. It also shows that online advertisement is also one of the main reasons for childhood obesity (Alfano et al., 2022). A specific link in the source material between junk food ads and heightened instances of post-viewing information-seeking behavior cannot be isolated. We posit:

H2: Increased interest in junk food advertisements leads to a higher desire for the product among youth.

The theory of emotional branding states that it is the emotional triggers like happiness, nostalgia, freedom, etc., that overshadow the rational decision-making process (Kotler & Armstrong, 2015). Coca-Cola's 'Investment Brand Campaign Open Happiness' campaigns bring these rewards to create subconscious associations (like junk food equals social acceptance). Thinking these promotions for junk foods are alluring brings into focus the thought of junk foods. The advertisements of various promotions, such as discounts, combo meals, etc., influence consumer behavior. However, whether they stand any chance of keeping the customers' loyalties in the long run is, in itself, an arguable question (Are Value Meals Worth It for Restaurants?). In some cases, food advertisements, especially those targeting children, are linked with greater consumption of unhealthy food and with positive attitudes toward these products (Alfano et al., 2022). The social theory sees how observing product endorsement encourages longing for that endorsement. While there is scant empirical evidence on the applicability of this theory to junk food advertising, it is considered a general rule in advertising. We posit:

H3: Emotional appeals (e.g., associating junk food with happiness, social belonging) in advertisements significantly increase youths' desire to consume advertised products.

Promotions have been shown to have a significant effect on consumer preference when it comes to making a purchase. Fast-food chains have been found to pull the interest of many customers

with promotions like the value meals and discounted offers for making a purchase. Discounts, buy-one-get-one offers, or points-based rewards make me buy junk food more. These are promotional techniques that make products all the more droolworthy. High-value promotions such as discounts and special promotion offers have been proven to enhance consumer interest and purchasing intentions. Advertising has been of enormous influence in making me choose junk food over other kinds of food. Well, know that advertising plays a crucial role in shaping consumer demeanor. Advertising junk foods to children has been reported to bolster their consumption and liking of such products, thereby influencing their food-behavioral preference. Seeing limited-time offers or 'special deals' makes people more likely to buy junk food. Limited-time promotions ultimately create urgency, thereby stimulating the desire for immediate response. In chapter 6 of Behavioral Economics Marketing, the entry of limited-time promotions gave converts higher sales and engagement through forcing immediate decisions. It is evident that household that are more exposed to promotion and multi-buy offers bought significantly more unhealthy food and drinks (Watt et al., 2023). According to Hosny and Abdelhamied (2013), in fast-food contexts, promotions like value meals or combo deals lead to higher visit frequency and quantity consumed, though may negatively impact brand loyalty post-promotion.

H4: Promotional nudges (e.g., one-click ordering, app-based discounts) significantly increase the likelihood of youth translating desire into immediate consumption.

Regulatory elements like health warnings or ad restrictions don't always reduce attention, in some cases, they can actually make youth more curious or engaged. When something appears regulated, it may feel more credible or important, prompting viewers to pay closer attention. As a result, regulation can unintentionally boost interest in the very ads it aims to control.

H5: Regulation positively influences youth interest in junk food advertising.

Regulatory features like limited-time airing, age disclaimers, or visible warnings may add urgency or a sense of legitimacy that prompts immediate behavior. Youth might interpret such ads as more serious or credible, which paradoxically encourages quicker action. In some cases, restrictions can actually reduce hesitation and increase response.

H6: Regulation positively influences youth action toward junk food consumption. Regulation doesn't just influence perception — it can also shape how and when consumers act.

Health warnings on food packaging are known to influence consumer choices. For example, implementation of front-of-package warning labels in Chile led to an impressive reduction in sugary drink consumption: users report a 25% decrease in 18 months after application of (Taillie et al., 2020) regulations. Seeing less junk food advertising would decrease my craving for unhealthy snacks. Junk food advertising actually does lead to decreased craving and consumption. For instance, according to the newspaper "The guardian" effective July 1, 2025, South Australia will ban the advertising of unhealthy foods on public transport with the goal of counteracting the effects of junk food marketing on children's eating habits. Actually, concrete effects have on consumer behavior the regulations of government in advertising. In Australia, these bans aimed at advertising foods high in sugar, salt, or fat are aimed primarily at public health issues such as obesity. They are depriving children of exposure to unhealthy food marketing so as to affect the foods they eat.

H7: Regulatory policies (e.g., ad bans, health warnings) moderate the relationship between junk food advertising and youth consumption, reducing its impact.

According to Regulatory Focus Theory (Higgins, 2012a), regulations can alter perceived norms and introduce cognitive dissonance (e.g., health warnings serve to counteract emotional appeals). The influence of external factors (e.g., policies) on the AIDA model dictates this process as well. The usage of junk food would automatically reduce if there were restrictions on advertisements promoting it. Would it not be appropriate to say that such advertising would actually affect the child's food preference and consumption behavior? It calls for action from governments in ensuring that much exposure to food marketing by children is controlled. Such marketing, according to the World Health Organization, makes a big contribution to the risk of overweight and obesity among children.

H8: Psychological persuasion tactics in junk food advertisements (e.g., catchy slogans, sensory triggers) significantly increase youth consumption behavior by overriding rational decision-making. In the AIDA model of communication, the persuasive effect of communication (in the Desire stage) is represented as the controllable antecedent of behavior, whereas the Dual-Process Theory (Kannengiesser & Gero, 2019) has it that sensory and emotional cues activate impulsive. The theory of Cognitive Response (Cacioppo & Petty, 1979) refers to how catchy slogans and jingles invite repeated cognitive processing, rendering the original message more memorable and persuasive. And such repeated exposures would frequently enhance brand recall and influence actual purchase decisions. Catchy commercials tend to stick with consumers enhancing the advertisements' persuasive ability greatly, especially with food products. Background sound and visuals that are fast and furious are my excitement for junk food ads. Reinstating the dual process theory (Kannengiesser & Gero, 2019) background music and fast-paced visuals appeal to the System 1 of thinking, which is intuitive, fast, and emotional. Conversely, these sensory cues evoke emotions that create excitement, and attention-grabbing ads will affect impulse buying decisions.

4. Method

4.1 Measurement

The measurement model is consisting of seven constructs, each of them were assessed using Likert scale (1 = Strongly Disagree, 7 = Strongly Agree). They have been adapted from previous scales that were validated in advertising, marketing and behavioral psychology literature. Adapted scales and sources are: Attention and interest constructs were adapted from (Rakwach, 2022), Desire from (Kotler & Armstrong, 2015), Action (Promotional Tactics) from (Adkisson, 2008), Psychological Persuasion from (Cialdini, 2001), Regulation Awareness from (Higgins, 2012b) Consumption Behavior from (Harris et al., 2022).

4.2 Data

Survey was created in “Qualtrics” website and it was shared across different social media platforms to respondents. Facebook, Personal messenger inbox, WhatsApp groups were the most effective mediums in terms of gathering the data. In the very beginning of the survey, Respondents were asked to give consent by agreeing to the terms and conditions and their voluntary response clause. A response of just over 30 respondents were gathered and used as a sample in Smart PLS 4.0 to get a brief idea about whether the dataset is ready for gathering more data or not. After that, gathering the final responses for the main data, the dataset was cleaned and checked for incomplete responses. After that, the measurement model was tested to assess the reliability.

To assess common method bias (CMB), this study took into account both the Marker Variable Test (Lindell & Whitney, 2001) and Harman’s Single Factor Test (Malhotra et al., 2006), following the path of validity check. As shown in Table 5.1, the marker variable value was 0.0484, and the Harman’s single factor explained 47.102% of the variance, which is below the commonly accepted 50% threshold. These findings indicate that common method bias is not a significant issue in this study. The final survey was conducted among 201 participants. The male respondents are 53%. 51% of these participants belonged to the 25-29 age group. 115 of the total participants are from Bangladesh meanwhile 64 respondents are from Portugal. The Table contains the detail of respondents.

Table 1 - Sample characteristics.

Distribution (n=201)					
Gender			Education		
Female	94	47%	Lower than bachelor’s degree	42	21%
Male	107	53%	Bachelor	102	51%
			Master's degree or higher	57	28%
Age			Income		
<25	59	29%	Prefer not to answer	63	31%
25-29	102	51%	Less than 500 euros	45	22%
>29	40	20%	Between 501 and 1000 euros	43	21%
			Between 1001 and 2000 euros	31	15%
			Between 2001 and 3000 euros	9	4%
			More than 3000 euros	10	5%

5. Results

The result section demonstrates surprising findings from the data collected via structured survey and measured and analyzed using PSL-SEM in SmartPLS4.0. The analysis was structured in two major sections: one being the measurement model evaluation that assessed the reliability and validity of the constructs, the other being structural model evaluation that examined the hypothesized relationships among the constructs depending on the AIDA framework and the moderating effect of regulation.

5.1 Measurement Model Evaluation

In order to test the hypothesis, initially some assessments are needed to be done to ensure that constructs demonstrated sufficient reliability, convergent validity and discriminant validity. All the evaluation was conducted using SMartPLS 4.0. However, before proceeding with structural relationship, the reliability and validity of each construct were analyzed in order to measure the model was both statistically and theoretically sound.

The internal consistency was examined by Cronbach's Alpha (CA) and composite reliability (CR), with all constructs exceeding the recommended threshold of 0.7, indicating strong reliability. According to Table 2, CA and CR are above that threshold. The values were above 0.5 threshold, confirming convergent validity in regards to Average Variance Extracted (Hair, 2014). On Table 2, the details of means, standard deviations, and reliability indicators have been discussed.

The result demonstrates high internal consistency particularly on attention and interest, suggesting that the youth respondents consistently acknowledged regarding the manipulation marketing elements initially capture the attention and maintain the interest. Not only these two, but also desire and action elements as well showed great possibility supporting the theoretical sequence of persuasive influence that led to consumption behavior.

The first step in evaluating discriminant validity was to examine loadings and cross-loadings. Every loading displayed higher values than the matching cross-loadings (see Appendix B). In the second step, given that the values shown in the diagonal are the square roots of the average variance extracted (AVE), we examine if the square root of AVE is higher than the correlation between the constructs (Fornell & Larcker, 1981). Table 2 shows that the correlations between constructs are lower than the square root of AVE. As shown in Appendix C, discriminant validity was assessed with Hererotrait-Monotrait (HTMT) ratio correlations less than 0.9. (Henseler et al., 2015).

Table 2 - Means, standard deviations, correlations, and reliability and Convergent validity measures (CR, CA, and AVE) of latent variables.

Constructs	Mean	SD	CA	CR	Attent	Interest	Desire	Action	Regul.	PsycPers	CBehav
Attention	5.538	1.315	.828	.886	.813						
Interest	4.933	1.507	.853	.901	.666	.834					
Desire	5.355	1.465	.879	.917	.619	.757	.857				
Action	5.223	1.368	.824	.882	.536	.628	.701	.807			
Regulation	5.130	1.397	.825	.883	.550	.535	.459	.485	.808		
Psyc.Pers	5.127	1.448	.839	.892	.605	.651	.733	.724	.544	.821	
Cons.Behav	4.755	1.565	.905	.930	.572	.700	.699	.693	.592	.750	.852

5.2 Structural Model Evaluation

The hypothesis model was bootstrapped with 5000 samples. The Path coefficients (β) demonstrates the bond and the direction of the relationships, meanwhile the t-values determine the significance of the hypothesis. The VIF (Variance Inflation Factor) values are all below 5 indicating no Multicollinearity issues.

As the result can be seen on the table, it seems Interest, Action has significant influence on the consumption behavior however, Attention and Desire do not have significant influence on consumption behavior going against the initial hypothesis. Regulation has seemed to be playing a decent role supporting interest and action affecting the consumption behavior. However, Surprisingly, it seems that psychological persuasion has the most significant predictor of youth consumption behavior in this model.

An R^2 value of 0.701 means that almost 70.1% of the variance in the consumption behavior can be explained by the predictors: Interest, Action, Regulation and Psychological persuasion. This is considered a decent substantial in regards to established PLS-SEM threshold (Hair et al., 2019), which define R^2 values above 0.67 as strong, between 0.33 and 0.67 as moderate, and below 0.33 as weak. Control variables do not seem to have any significant direct influence on the consumption behavior.

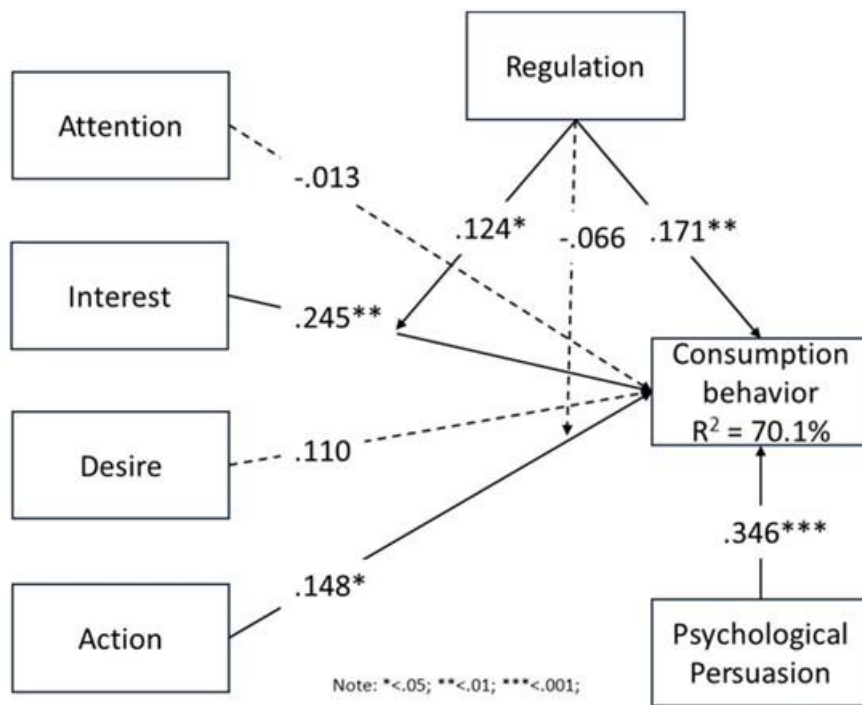


Figure 2 Structural Model result

6. Discussion

Out of all the hypothesis tested, it seems like Interest, Action, psychological persuasion was supported, while Attention and desire did not support it. The moderating role of regulation awareness found to be partially significant enforcing the relationship between interest and consumption behavior. These findings actually demonstrate that AIDA model continues to hold explanatory power in digital context, although its traditional sequence does not entirely apply the youth demographic. The significance impact of interest aligns with (Kotler & Armstrong, 2015) who argue that interest represent the critical point of consumer curiosity and engagement. This goes similarly for Action emerged as a strong driver of consumption who found promotional offers and Call to action effectively trigger behavioral response (Harris et al., 2022).

Principles of persuasion emphasizing on the sensory cues, emotional appeal works as a powerful mechanism shaping impulsive consumption has already been demonstrated by psychological persuasion (Cialdini, 2001). These findings reinforce how manipulative marketing can override rational decision-making among younger audiences.

On the other hand, Attention and Desire were not found significant predictors. This partially challenges the original AIDA model, which assumes a linear build-up from attention to action. One of the possible explanations is the phenomenon of digital advertising fatigue, as noted by (Higgins, 2012a) where constant exposure to visual stimuli desensitizes consumers and reduces responsiveness in early persuasive states. Moreover, the emotional saturation of Junk food advertisements may cause youth to skip the desire phase.

The moderating effect of regulation awareness ($\beta = 0.124$, $t = 2.169$) was found to be significant but comparatively modest providing the information that awareness of advertising regulations helps amplify responsible interest but is not sufficient to fully counter the manipulative power of digital marketing. The finding partially supports with the study that argues that nudges and soft regulations often fail to alter deep-seated behavioral tendencies when strong emotional triggers are present (Adkisson, 2008).

Overall, the findings prove that while the regulatory awareness provides a partial buffering effect, the persuasive dominance of digital marketing remains largely intact. The AIDA model therefore holds partial validity in the context of youth-targeted junk food advertising.

6.1 Theoretical Implication

The model seems to be supporting the AIDA Model Partially. Among the 4 components of AIDA model, Interest and Action had a significant influence on youth Consumption behavior of Junk food. That means, while people see advertisements related to Junk food, Interest such as engagement, thinking, preference and curiosity tends to be influencing the young generation into consuming the food. Alongside with the Interest component, Action also plays a major role influencing among the young generation due to special deals, limited time offers enforcing customers to buy the food. When traditional study P. Kotler and Armstrong (2015) emphasize the

sequential influence in all four stages, this research regarding junk food only appears to have interest and action as significant suggesting a shift in digital age consumer responsiveness.

On the other hand, Attention and desire were not found to be influencing the consumption behavior of Youth much. The justification lies within the two successful hypothesis itself. Providing the fact that food companies are spending so much money, on advertising bombarding the social media sites and platforms into various advertisement with high frequency, yet, the consumption highly depend on the mind. If Someone is not actively thinking about having a junk food, or not actively researching, it is not unusual even after being exposed to an ad, he might not end up buying that. Because at the end of the day, Psychology has a lot to do with this. This aligns with Digital Fatigue Theory, which indicates that users exposed to frequent stimuli may become desensitized, tuning out even visually dominant content. Reinforcing the failure of “desire” as a successful direct predictor also indicates that even if some craves for junk food, does not necessarily mean that he will end up buying that.

Surprisingly, it seems like, psychological persuasion has been the most effective direct influencer to consumption behavior for youth. Reinforcing that emotional, sensory, and social cue override rational decision-making, especially in the “desire-to-action” gap among youth. People are rational human being, hence, a good slogan, some sensory visuals, scarcity appeal directly influence the consumption behavior. The most surprising thing is that, despite speaking of this generation, who scroll past numerous ads a day, still the psychological persuasion works like magic like it used to in traditional marketing. That makes it not just powerful, but arguably the most manipulative, and effective, tool in the marketing arsenal. Arguments presented by Mehta and Bharadwaj (2021) shows that emotional and sensory appeal can bypass logical resistance that relevant to be found in this study as well.

The study also shows that there is a significant and positive impact of regulation on youth consumption behavior-but not in a paradoxical impact of regulation on youth consumption behavior. Based on the survey items, it can be said that youth who seem to believe that regulation can reduce the consumption are also more likely to report that reduced junk food consumption themselves. Support for regulation is also associated with healthier consumption attitudes. This actively supports the idea that public policy and advertising regulation are not only necessary but also effective as well especially for youth aged 15-24, a group that is typically left out of child-protection advertising laws. This further validates the importance of expanding current regulatory policies to protect this often-overlooked age group. The moderating effect of regulation observed here builds on Ertz and Le Bouhart (2022) work, which suggested that regulatory environments shape not only exposure but also internal decision pathways

The figure 3 shows the impact of statistically significant of regulation moderator over interest to consumption behavior. The regulation moderator suggests the major impact of interest over consumption behavior among people with tendency for high regulation. For people with tendency for low regulation, the interest is not important in explaining the consumption behavior.

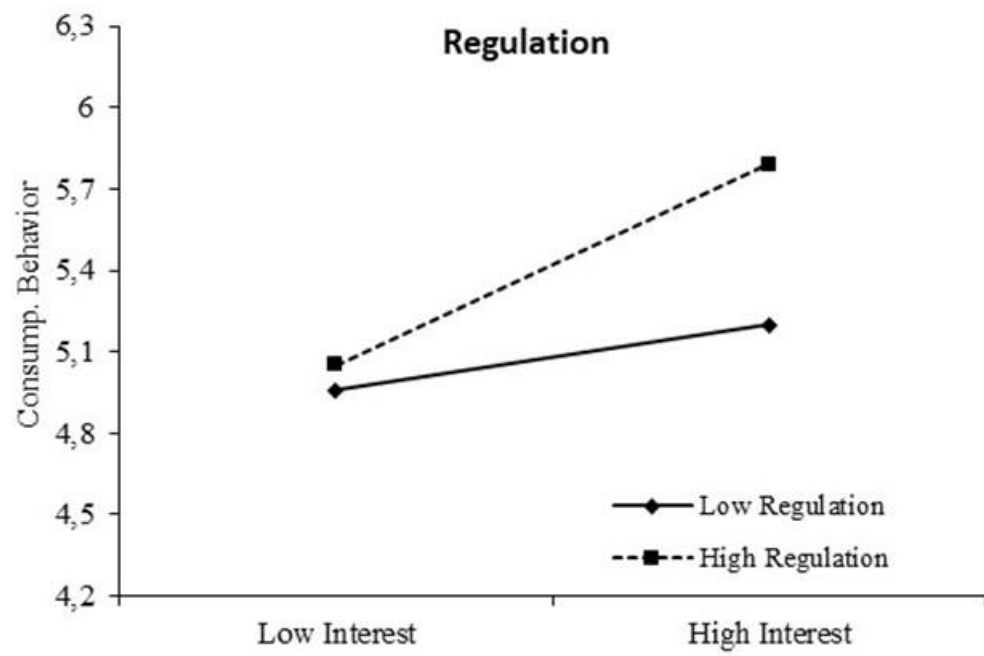


Figure 4 - Moderator effect

6.2 Practical Implication

In the lights of the findings, this study provides several practical implications that link directly to the survey items and their influence on youth consumption behavior of junk food. These implications are extended to marketers, policymakers, educators and surrounded by ethical, social and regulatory responsibilities in advertising targeted toward younger audiences.

Starting with the Attention, under this construct (e.g., “I tend to notice junk food ads more than other types of ads,” “Bright colors and bold visuals in junk food ads catch my attention,” and “Eye-catching designs in junk food ads make me stop and look”) dictates that visual appeal seems to be a powerful element in youth engagement. This reinforces the fact that even in a media-saturated environment, vivid visual and design cues can successfully capture attention. However, it is to be noted that, Attention itself is not a strong predictor of consumption behavior. Marketers should understand that visual appeal without ethical storytelling or value alignment may fail to convert interest into action. For society, this implies a growing need to regulate the use of exaggerated visuals that attract younger audiences, reinforcing the importance of content moderation guidelines.

Secondly, discussions regarding Interest, such as “I find junk food advertisements visually more attractive than other food ads” reinforces the fact that interest phase is where emotional connection begins. It demonstrates that youth engagement is also dependent on aesthetic appeal and emotional tone rather than rational evolution of product benefits. Hence, Marketers aiming to maintain ethical standards should focus emotional appeal responsibly, ensuring that youth are not misled. For policy makers, this highlights the importance of framing advertising regulations that control emotional exploitation in marketing messages, specially on social media platforms where these tactics are most prevalent.

Thirdly, Despite the fact that Desire showed a weaker influence in the model, its’ implications remain valuable. The findings demonstrates that even if young people find the ads appealing or attractive, their cravings do not necessarily transform into purchase – potentially due to heightened awareness or social consciousness. Marketers should understand that overpromising emotional satisfaction may now backfire, leading to skepticism among youth consumers. Society wise, this is a great learning in terms of suggesting that health awareness campaigns and education initiatives may be slowly counteracting the manipulative pull of junk food advertising.

Survey results demonstrating that the action constructs – associated with promotions influencer endorsements, and rewards-based marketing-had a significant impact on consumption behavior. Limited time offers, influencer recommendations, and social media challenges effectively convert interest into purchasing decision. For practitioners, this creates the need to use the techniques ethically and transparently, avoiding persuasion of deceptive scarcity tactics. Regulators should monitor these forms of digital promotion closely.

The findings also highlight that psychological persuasion still plays a major role in shaping youth consumption behavior. Marketers continue to rely on emotional storytelling, social proof, and authority-based influence to trigger responses, often without the audience realizing it. These methods reach beyond simple advertising—they subtly manipulate how young people think, feel, and behave toward certain brands or products. On the other hand, the results from regulation awareness indicate that even though many respondents understand the need for advertising laws, they feel that enforcement is still weak. This shows a clear gap between awareness and action. Policymakers must take this seriously and strengthen how digital marketing activities are monitored, ensuring that companies are held accountable for manipulative or unethical advertising practices. To reduce these negative influences, media literacy education should become a stronger focus, both in schools and across communities. Teaching young people how emotional and psychological triggers work in advertisements can help them think critically before making choices. When youth understand how persuasion operates, they are less likely to fall for manipulative content and more likely to make mindful and informed decisions. This kind of awareness can build a more conscious generation—one that values authenticity, transparency, and well-being over deception in digital marketing.

6.3 Limitations of Future Research

There are many limitations of this study. Starting with the responses, the data was gathered mostly from Bangladesh and Portugal. There might be a noticeably distinct difference between these two nations and globally. The response from another part of the world may vary based on cultural, economic and many other several factors. The study mostly focuses on Advertising, However, since it is a really broad term, there could be components that might have been limited while thinking as “Advertisements” such as newspaper ad, leaflets, packaging, on point sale ads etc. Since, the full study was based on only questionnaires, probably focused discussion with group might have given more insights to it. Though 201 responses is a decent amount, to accept the survey result of, however, it is the bare minimum, More responses might have demonstrated more insights’ Timeframe is not sufficient enough to be useful as in resourceful in the future research as the mentality, consumption behavior, thinking process keeps on changing over and over Qualitative follow up studies (individual studies) might have revealed deeper psychological insights as a person may perceive an advertisement different than probably a handful of other consumers.

7. Conclusion

To conclude the study, the overview of the study examined how manipulative strategies – particularly AIDA model, psychological persuasion, and regulatory influence, impact junk food consumption behavior among youth. With the support of a quantitative, survey-based analysis and structural equation modeling, the research demonstrated some expected and some surprising insights into shaping the marketing decisions to a vulnerable group of consumers.

Despite the fact that the history of AIDA model is really reliable, however, the result of the study has shown partial alignment in the digital context for the fast-food industry as Interest and Action were found to be really significant whereas Attention and Desire-often emphasized in advertising proving to be a limited role. However, the most surprising and important finding was the overpowering influence of psychological persuasion. Emotional cues, sensory triggers and social proof did not only bypass logical resistance but actively drive behavior. This supports the existing literature mostly the youth who are still on the development stage of cognitive filter of marketing messages.

The role regulation had a major impact moderating the youth consumption behavior as well. Belief in regulatory measures was significantly associated with more health-conscious consumption attitudes, and regulation itself played a moderating role by dampening the influence of interest on consumption behavior. This emphasizes the critical role that effective public policy can play in counteracting manipulative marketing strategies and fostering healthier choices among young consumers.

Overall, this research seems to be contributing to both academic theory and social practice. It showcased a refined view of AIDA's application in modern youth-oriented advertising in junk food industry. Practically, there are many scopes for implication for policymakers, educators, and ethical marketers. As digital platforms continue to dominate the marketing landscape, the insights gained from this study serve as a timely reminder that influence is not only about persuasion—but also about protection.

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Appendix A - Questionnaire items

Constructs	Items	Source
Attention	ATT1 I tend to notice junk food ads more than other types of ads. ATT2 Bright colors and bold visuals in junk food ads catch my attention. ATT3 I find Junk food advertisements visually more attractive than other food ads. ATT4 Eye-catching designs in junk food ads make me stop and look	(Rakwach, 2022)
Interest	INT1 Junk food promotions make me curious to know more about the food. INT2 If a junk food advertisement is engaging, I tend to watch/read the full content. INT3 I find information about junk food products interesting when presented in advertisements. INT4 I sometimes look up details about a junk food product after seeing an ad.	(Rakwach, 2022)
Desire (Emotional Appeal)	DES1 Seeing Lucrative Promotion for junk food makes me want to eat it. DES2 Watching ads about junk food increases my cravings. DES3 Advertisements make junk food seem more appealing than other types of food. DES4 If I see others enjoying junk food in an ad, I feel a stronger desire to have it.	(Kotler & Armstrong, 2015)
Action (Promotional Tactics)	ACT1 I am more likely to purchase junk food after seeing promotions. ACT2 Discounts, buy-one-get-one offers, or loyalty rewards encourage me to buy junk food. ACT3 Advertising influences my decision to choose junk food over other food options. ACT4 Seeing limited-time offers or 'special deals' makes me more likely to buy junk food.	(Thaler & Sunstein, 2009)
Regulation	REG1 If junk food advertising was restricted, I would be less likely to buy junk food. REG2 Health warnings on junk food ads make me reconsider my food choices. REG3 Seeing fewer junk food ads would decrease my cravings for unhealthy snacks. REG4 Government regulations on food advertising influence my decisions about what to eat.	(Higgins, 2015)
Psychological Persuasion	PSY1 Catchy slogans and jingles related to junk food stick in my mind. PSY2 Background music and fast-paced visuals make junk food ads more exciting to me. PSY3 Advertisements that show 'limited-time only' products make me feel urgency to buy. PSY4 The way junk food is presented in ads (e.g., steam, melting cheese, close-ups) makes it look irresistible.	(Cialdini, 2001)
Consumption Behavior	YCB1 I often buy junk food, especially when I am exposed to promotions. YCB2 Advertisements influence how much junk food I consume. YCB3 I tend to prefer advertised junk food over unadvertised alternatives. YCB4 Even when I do not plan to eat junk food, advertising sometimes changes my mind. YCB5 I know Junk Food is harmful for body, yet, I feel like eating after being exposed to advertisement or branding.	(Harris et al., 2022)
Filter and Controls	Age (in years) Gender (Male = 1; Female = 0) Education - Highest academic degree earned Income - What is your monthly gross income?	

Appendix B - PLS loadings and cross-loading

Constructs		Attention	Interest	Desire	Action	Regulation	Psyc.Pers	Cons.Behav
Attention	ATT1	.741	.444	.440	.349	.422	.446	.434
	ATT2	.856	.557	.497	.427	.450	.489	.497
	ATT3	.836	.580	.575	.488	.480	.500	.452
	ATT4	.816	.580	.502	.476	.438	.533	.473
Interest	INT1	.572	.780	.622	.526	.397	.468	.566
	INT2	.568	.863	.668	.547	.435	.589	.603
	INT3	.588	.892	.651	.540	.538	.590	.634
	INT4	.489	.795	.581	.481	.407	.517	.523
Desire (Emotional Appeal)	DES1	.559	.684	.857	.592	.452	.635	.647
	DES2	.512	.659	.905	.612	.326	.640	.593
	DES3	.597	.569	.819	.618	.399	.601	.544
	DES4	.460	.675	.846	.584	.391	.633	.605
Action (Promotional Tactics)	ACT1	.384	.541	.547	.810	.438	.578	.622
	ACT2	.288	.372	.471	.774	.255	.448	.408
	ACT3	.533	.619	.701	.870	.444	.728	.656
	ACT4	.493	.443	.504	.772	.386	.531	.492
Regulation	REG1	.567	.534	.436	.431	.854	.469	.528
	REG2	.403	.349	.270	.245	.751	.364	.342
	REG3	.470	.386	.406	.430	.798	.466	.435
	REG4	.346	.434	.351	.423	.827	.448	.559
Psychological Persuasion	PSY1	.450	.440	.467	.430	.439	.783	.544
	PSY2	.504	.537	.604	.566	.515	.868	.625
	PSY3	.489	.560	.616	.690	.422	.813	.643
	PSY4	.541	.588	.701	.669	.415	.820	.643
Consumption Behavior	YCB1	.438	.537	.523	.578	.512	.581	.794
	YCB2	.498	.580	.510	.558	.524	.588	.870
	YCB3	.522	.566	.551	.595	.542	.649	.866
	YCB4	.419	.620	.617	.569	.447	.642	.856
	YCB5	.550	.668	.756	.644	.499	.722	.872

Appendix C - Heterotrait-Monotrait Ratio of correlations (HTMT)

Constructs	Attention	Interest	Desire	Action	Regulation	Psyc.Pers	Cons.Behav
Attention							
Interest	.790						
Desire	.728	.871					
Action	.635	.728	.808				
Regulation	.668	.624	.530	.556			
Psyc.Pers	.724	.763	.846	.840	.650		
Cons.Behav	.658	.792	.776	.777	.667	.855	

Appendix D – Ethics Committee approval



This is to certify that

Project No.: **DDMKT2025-4-296851**

Project Title: **Final Manipulative Marketing Strategies of Junk Food: How Ads Target and Influence Youth**

Principal Researcher: **Toufiq Hossain**

according to the regulations of the Ethics Committee of NOVA IMS and MagIC Research Center this project was considered to meet the requirements of the NOVA IMS Internal Review Board, being considered **APPROVED** on 5/5/2025.

It is the Principal Researcher's responsibility to ensure that all researchers and stakeholders associated with this project are aware of the conditions of approval and which documents have been approved.

The Principal Researcher is required to notify the Ethics Committee, via amendment or progress report, of

- Any significant change to the project and the reason for that change;
- Any unforeseen events or unexpected developments that merit notification;
- The inability of the Principal Researcher to continue in that role or any other change in research personnel involved in the project.

Lisbon, 5/5/2025

NOVA IMS Ethics Committee
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