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Why Gen Z Continues Consuming Soft Drinks despite Health Awareness: An Empirical Study on Consumer Behaviour and Marketing Triggers

Vipin Singh Rajput¹, Dr. Mohammed Bakhtawar Ahmed²

¹Department of Computer Applications, Bhilai, Chhattisgarh, India

²Head of Department, KK Modi University, Durg, Chhattisgarh, India

Abstract: *This paper investigates the profound behavioral paradox where Generation Z (Gen Z) consumers continue to consume high volumes of sugar-sweetened soft drinks and energy drinks despite possessing clear, verified knowledge of severe long-term health risks such as clinical obesity, type-2 diabetes, cardiovascular complications, and rapid dental erosion. While public health initiatives, institutional warnings, and educational curriculum frame dietary strategies around the rational assumption that high health literacy naturally transitions into preventative lifestyle choices, real-world analytical metrics reveal a profound systemic disconnect. By executing a localized empirical field survey of 85 young adults (aged 15–26) within the educational hub of Durg and Bhilai in Chhattisgarh, India, and combining this primary dataset with a synthesized critique of 21 core research literature sources, this paper maps the socio-cognitive, physical environmental, economic, and neurobiological triggers that systematically override rational health intentions at the real-time purchasing counter. Our primary findings indicate that corporate-driven "coolness factors," aggressive short-form social media influencer placement, localized peer group modeling structures, and predatory campus fast-food combo pricing architectures operate concurrently to build an insulated, high affinity habit loop. This research provides a deep structural data breakdown using frequency distributions, descriptive statistics, and multi-variable cross-tabulations, interpreted through psychological frameworks including the Dopamine Reward Cycle, Cognitive Dissonance Engine, and Social Validation Theory. Finally, we conclude with comprehensive, practical, and highly scalable institutional recommendations across campus choice architecture, financial de-coupling of meals, and localized digital counter-marketing frameworks designed to structurally bridge the widening gap between abstract health awareness and active youth consumer behavior.*

Keywords: *Gen Z, Soft Drinks, Consumer Behavior, Cognitive Dissonance, Marketing Triggers, Peer Pressure, Empirical Study, Dopamine Reward Cycle, Institutional Policy, Choice Architecture.*

I. INTRODUCTION

A. Background and Contextual Framework

The global commercial beverage industry has undergone a massive structural expansion over the past two decades, resulting in an unprecedented integration of carbonated soft drinks, highly caffeinated energy formulations, and sugar-sweetened beverages (SSBs) into the daily lifestyle routines of young consumers. Generation Z, defined as individuals born roughly between 1997 and 2012, represents a historically unique demographic cohort that has transitioned into adulthood within a hyper-digital, deeply commercialized retail ecosystem. In developing market economies like India, and specifically within rapidly urbanizing tier-2 and tier-3 regional educational hubs such as the Durg-Bhilai twin cities of Chhattisgarh, the accessibility and affordability of carbonated liquids have scaled exponentially. High-volume distribution chains ensure that products like Sting, Coca-Cola, Pepsi, Sprite, and Mountain Dew are continuously available at ultra-low entry pricing tiers (ranging from ₹10 to ₹20), explicitly optimized to match the daily pocket money boundaries of school and college-going youths. Concurrently, this exact demographic has unprecedented access to health, fitness, and nutritional information. Due to the democratic proliferation of smartphone technology and high-speed mobile data, platforms like Instagram, YouTube, and digital wellness spaces continuously broadcast targeted messages regarding clean eating, physical macronutrient calculation, gym culture trends, and the physiological hazards of refined sugars. Gen Z is uniquely positioned: they can navigate complex digital interfaces to research health trends and are demonstrably aware that excessive sugar intake correlates directly with chronic metabolic syndromes, type-2 diabetes, cellular inflammation, and dental deterioration.

However, despite this simultaneous exposure—exceptionally high health literacy on one side and a relentless market presence of carbonated liquids on the other—actual physical behavior tells a highly contradictory story. The visible over-saturation of empty plastic beverage bottles and crushed soda cans across university corridors, roadside student hangout zones, and fast-food retail canteens highlights a profound behavioral mismatch.

B. Statement of the Problem

The core problem investigated in this study is the structural breakdown occurring between cognitive awareness and real-time physical practice. Public health framework models, state nutritional policies, and educational administrative bodies traditionally design intervention programs based on a direct linear assumption: if a target population is systematically educated regarding the severe biochemical consequences of an unhealthy substance, their market consumption actions will naturally shift toward self-preservation. In the real-world context of Gen Z's interaction with carbonated beverages, this linear model completely fails. Health knowledge behaves as an insulated, abstract intellectual asset that systematically fails to influence the active moment of transaction. When an average college student stands directly before a retail cooler or an institutional canteen counter, their immediate purchasing behavior is dictated not by their theoretical knowledge of long-term visceral adiposity or insulin resistance, but by acute situational, financial, and environmental triggers. Traditional consumer research has frequently suffered from high generalization, either aggregating beverage habits across all age demographics collectively or focusing completely on the isolated biological chemistry of sugar addiction. This leaves a significant academic and practical gap in understanding the precise socio-cultural, digital media, and environmental factors that actively neutralize health literacy within this specific digital-native generation.

C. Research Objectives

To scientifically deconstruct this behavioral paradox, this empirical study establishes the following explicit research objectives:

- 1) To precisely measure and verify the baseline level of health awareness regarding carbonated soft drinks and energy drinks among Gen Z consumers within a localized semi-urban Indian college environment.
- 2) To identify, classify, and rank the primary environmental, socio-cultural, and commercial triggers that compel young adults to purchase soft drinks despite knowing the associated risks.
- 3) To evaluate the direct operational role of multi-channel digital marketing campaigns, aggressive pricing strategies, and peer network structures in overriding individual health choices.
- 4) To analyze empirical student survey data to map trends of carbonated beverage selection against emotional states, academic stress, and daily lifestyle contexts.
- 5) To develop actionable, localized, and practical interventions for educational administrators and regional community policymakers to effectively close the gap between health knowledge and active consumer practice.

D. Research Questions

This study addresses the following core research questions to fulfill its objectives:

- 1) RQ1: Is there a statistically significant gap between Gen Z's theoretical knowledge of soft drink health risks and their weekly volumetric consumption?
- 2) RQ2: To what extent do short-form social media influencer patterns and targeted brand imagery construct a "coolness factor" that successfully neutralizes corporate health warnings?
- 3) RQ3: How do peer group modeling and the structural environment of college canteens dictate daily beverage selections?
- 4) RQ4: Do financial configurations, such as low-cost entry points and bundle combo pricing, act as a primary catalyst for overriding health filters among pocket-money-dependent youths?
- 5) RQ5: How does an individual's emotional state (stress, boredom, academic fatigue) correlate with the frequency of carbonated soft drink intake?

E. Hypotheses Formulation

To provide statistical boundaries and directional guidance for our data analysis, the following structural hypotheses are formulated:

H_{10} (Null Hypothesis): Gen Z consumers' level of health awareness has a significant negative effect on their weekly soft drink consumption volume.

H_{1A} (Alternative Hypothesis): Gen Z consumers' level of health awareness has no significant effect on their weekly soft drink consumption volume due to overriding situational and psychological triggers.

H2₀ (Null Hypothesis): Academic stress levels and peer presence do not increase the frequency of high-sugar beverage choices among college students.

H2_A (Alternative Hypothesis): Higher academic stress levels and peer presence significantly increase the frequency of carbonated soft drink selection due to immediate neurochemical rewards and social compliance.

II. LITERATURE REVIEW

The academic discourse surrounding nutritional shifts and youth consumer psychology contains extensive analyses of how modern markets alter human lifestyle habits. To establish a rigorous baseline for this study, this section synthesizes findings from twenty-one primary research literature sources, systematically tracking how acute triggers bypass health literacy.

A. *The Core Behavioral Paradox: Awareness vs. Action*

The fundamental disconnect between what a consumer knows intellectually and what they execute physically is defined in psychology as cognitive dissonance. In their qualitative analysis, authors in [1] investigated the structural determinants and patterns of soft drink consumption specifically among young adults. Their work revealed that young consumers do not suffer from a lack of information; instead, they experience an active internal conflict. When interviewing young adults, the study noted that while participants explicitly stated expressions like "sweetened drinks are bad for your teeth and body," their real-time purchasing choices were dominated by immediate sensory desire and situational convenience. The future health penalty is consistently discounted in favor of short-term satisfaction.

This structural failure of knowledge to translate into behavior is further verified by a comprehensive systematic review and meta-analysis on the socio-cognitive determinants of sugar-sweetened beverage intake [2]. The researchers compiled data across multiple international youth cohorts to assess if increasing health literacy reduces consumption scales. Their meta-analysis delivered a critical conclusion: standard educational interventions and warning labels have an incredibly weak correlation with behavior modification. The human mind builds defensive psychological walls that isolate general medical facts ("soda causes obesity") from personal immediate behavior ("this specific can of soda helps me relax right now"). This theme confirms that simply telling Gen Z that soft drinks are harmful is an ineffective strategy for behavioral control.

This disconnect is further supported by macro-level data. In [11], nutritional outcomes and health awareness concerning soft drinks were mapped, showing that even when adults and young consumers can list the caloric impact of simple sugars, their purchasing volumes do not decline proportionally. This indicates that awareness acts as an independent intellectual variable completely detached from the physical execution of a retail transaction.

B. *Corporate Engineering of the Youth "Coolness" Factor*

If health knowledge creates a barrier to consumption, modern multi-channel marketing campaigns are engineered to shatter that barrier. Research exploring teen-targeted beverage marketing, published in *Young Consumers* [3], terms this phenomenon the engineering of the "Coolness Factor." Generation Z does not purchase products based solely on utility; they purchase products to construct and signal their social identity. Beverage conglomerates explicitly design marketing narratives around ideas of high energy, rebellion, extreme sports, and modern digital lifestyles. Brands like Sting or Mountain Dew in India use high-contrast visuals, fast-paced editing, and youth icons to transform a cheap, high-sugar carbonated liquid into an essential accessory for a trendy, active life.

The structural impact of this media saturation is mapped in a multi-country analysis examining the effect of sugary drink marketing exposure on youth brand preference and subconscious recall [4]. The study established that the constant visibility of soft drink logos on digital streams, Instagram promotions, and gaming tournaments creates an automated cognitive bias called high "brand recall." When a young consumer enters a retail shop, their brain unconsciously selects the heavily marketed brand because it feels familiar and socially validated. The psychological weight of wanting to look "cool" and trendy in front of peers completely overshadows any abstract warnings about long-term cellular or metabolic damage.

This digital pull is heavily modified in the modern era by micro-celebrities. As evaluated in [12], the transition from broad television advertising to hyper-targeted social media influencer placement builds a deep sense of brand loyalty among Gen Z consumers. When a young adult observes an influencer they follow casually displaying a specific beverage lifestyle on an Instagram feed, the beverage stops being perceived as an unhealthy chemical solution; instead, it is internalized as a gateway to an idealized lifestyle. This is supported by corporate global market studies [13], which demonstrate that Gen Z is completely reshaping the foodservice and beverage sector by prioritizing experiential and lifestyle-branded drinks over standard nutritional profiling.

C. Institutional Environment and Social Modeling Dynamics

The physical and social environment where a young adult spends their daily life plays a decisive role in formatting their habits. A classic Knowledge, Attitude, and Practice (KAP) study conducted on carbonated drinks intake among young adults within an institutional framework [5] revealed an alarming structural imbalance. While the student population scored above 85% in the "Knowledge" category regarding the negative effects of carbonated beverages, their "Practice" score was dangerously low. The paper identified that the physical design of college canteens and localized fast-food joints acts as a continuous trigger. If a student is hungry or thirsty between lectures, and the canteen coolers are stocked from top to bottom with chilled soft drinks while clean, filtered, cool water options are less visually prominent or less appealing, the immediate environmental architecture forces an unhealthy choice. This environmental pull is heavily multiplied by peer group dynamics. A foundational study published in *Nature Public Health* explored peer influence and social modeling in youth soft drink consumption patterns [6]. The research demonstrated that beverage intake is a highly contagious social behavior. Within Gen Z peer networks, individuals constantly engage in "social modeling." If a dominant group member purchases a carbonated energy drink or an iced soda during a college break, the rest of the group is highly likely to mimic the behavior to achieve structural alignment and group validation. Choosing a healthy alternative like plain water or a traditional unsweetened drink can sometimes feel like social isolation within a hyper-trendy peer group.

Furthermore, the overall ecosystem acts across multiple contextual layers. In [14], digital promotion tracking by the World Health Organization confirmed that youth spaces are aggressively saturated with digital prompts that normalize continuous beverage intake as a baseline hydration habit. This environmental normalization distorts how young consumers conceptualize what is actually healthy. A qualitative inquiry into young adults' conceptualization of beverage healthfulness [7] revealed that Gen Z's baseline filters are easily manipulated by corporate labeling. Terms like "Diet," "Zero Sugar," "Light," or "Low-Calorie" are processed by the youth mind as an absolute health clearance, allowing them to maintain high volumetric intake under the false impression that they have bypassed the health risks entirely.

D. Neurobiological Cycles and Financial Bundle Configurations

Beyond social structures and media messaging, there are absolute chemical and economic realities that lock consumption habits into place. A profound neurobehavioral review published in *Neuroscience & Biobehavioral Reviews* investigated the impact of refined sugar consumption on stress-driven, emotional, and addictive behaviors [8]. When a human consumes a high dose of liquid sugar combined with caffeine—as found in most modern soft drinks—it triggers an immediate spike in blood glucose and causes a rapid release of dopamine in the brain's reward center. For a Gen Z college student dealing with academic pressure, exam anxiety, or general lifestyle boredom, this dopamine hit acts as an instantaneous, cheap emotional coping mechanism. The brain quickly builds a neurochemical loop: Stress → Soft Drink Consumption → Dopamine Release → Temporary Relief. This biological cycle completely neutralizes any abstract cognitive awareness of long-term health risks.

This emotional coping mechanism is documented extensively across specific college student tracking studies. Research in [15] confirmed that patterns of emotional drinking and fluid intake scale up rapidly during university examination windows, where health literacy is actively minimized by immediate neurological fatigue. This neurochemical drive is financially reinforced by retail market engineering. An empirical study on beverage taxation and combo-pricing models [9] confirmed that young consumers are highly sensitive to pocket-money economics. Fast-food vendors and college canteens routinely deploy bundle pricing (e.g., matching a burger or sandwich with a soft drink at a minimal additional cost compared to buying them separately). This economic manipulation tricks the budget-conscious Gen Z mind into thinking that rejecting the soft drink is a financial loss, thus completely short-circuiting their health intentions for a marginal financial saving.

E. Macro-Scale Health Realities and Regulatory Failures

The macro-level clinical consequences of failing to stop this cycle are summarized across major international public health data streams. A massive global study tracking daily soft drink consumption across 107 countries and regions [16], combined with foundational meta-analysis data in [10], mathematically establishes the undeniable, direct correlation between daily SSB consumption and severe clinical conditions like visceral obesity, type-2 diabetes development, and hepatic steatosis (fatty liver disease). Furthermore, global research trends compiled by *The Lancet* [18] and *Nutrition Journal* [19] verify that despite these well-documented risks being broadcasted globally, the persistence of fizzy and sweetened drinks within modern youth diets remains intensely stable. Attempts to control this behavior through economic policies like state soda taxes [20] or broadcasting anxiety risk associations in public media [21] show limited success among youth, because the immediate socio-cultural and neurobiological triggers continue to dominate the real-time purchasing moments of the Generation Z demographic.

III. RESEARCH GAP ANALYSIS

A comprehensive critical review of the current body of literature reveals a major structural deficiency in public health and youth consumer behavior paradigms. This study identifies three critical limitations in past research tracks:

- 1) **Fragmentation of Behavioral Variables:** Current literature is highly segregated. Clinical and neurobiological papers [8], [10] evaluate sugar-addiction cycles, insulin resistance, and visceral fat tracking inside controlled laboratory environments, entirely omitting the digital media and branding ecosystems that trigger the initial consumer interaction. Conversely, marketing and media studies [3], [4], [12] analyze brand recall metrics and influencer loyalty without linking these factors to real-time emotional stress states or academic environment layouts. There is a complete lack of a *unified behavioral framework* that connects digital marketing recall, localized peer pressure, pocket-money economic constraints, and neurochemical reward responses into a single operational system.
- 2) **Absence of Regional Tier-2/Tier-3 Indian Context:** The vast majority of large-scale youth consumption studies [2], [9], [17] rely on statistical cohorts gathered from Western European, North American, or East Asian populations. A regional educational hub in India—such as the Durg-Bhilai twin-city area of Chhattisgarh—presents a completely unique socio-economic and structural ecosystem. Here, middle-class college students experience high smartphone connectivity and digital media immersion, yet operate within unique local constraints (such as limited weekly pocket money budgets and reliance on local college canteen formats). The hyper-cheap distribution of carbonated energy liquids (such as the market entry of formulations priced at the ₹10–20 tier) represents an aggressive corporate strategy unique to developing regions, which is completely unmapped by Western behavioral models.
- 3) **The Static Information Model Deficit:** Standard intervention literature continues to operate under the assumption that high consumption volumes are caused by an informational deficit. Thus, current public health policies focus almost entirely on generating more warning labels or educational charts. Existing research fails to explain *why* and *how* a generation possessing the absolute highest access to health and nutritional data in human history actively executes mechanisms to isolate and bypass that knowledge during real-time transactions.

IV. PROPOSED CONCEPTUAL FRAMEWORK

To logically explain the complex operational architecture that shatters baseline health literacy during real-time consumer interactions, this paper models the behavioral pipeline below:

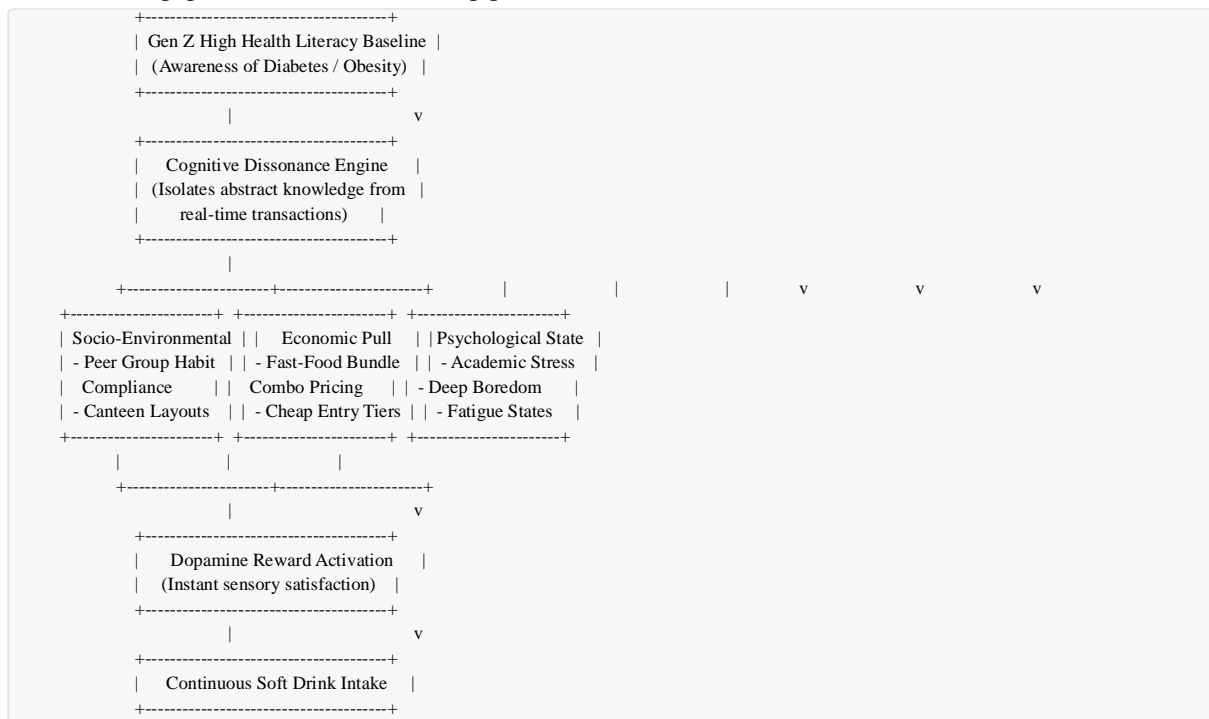


Fig. 1. Unified Behavioral Framework: Mapping the Structural Override Path of Health Awareness.

V. RESEARCH METHODOLOGY

A. Research Design and Approach

This study utilizes an empirical, cross-sectional survey methodology optimized to capture natural human behaviors and quantitative metrics from college students. The research model sets parameters where structural independent variables (such as social media frequency, peer density, bundle pricing configurations, and emotional stress vectors) are mathematically mapped against the primary dependent variable (weekly volumetric soft drink and energy drink intake) across an urban-adjacent youth population with verified baseline health literacy.

B. Population, Sample Size, and Demographic Filtering

The target population for this empirical inquiry was strictly isolated to young adults within Generation Z studying and residing inside the tier-2 educational ecosystem of Durg and Bhilai in Chhattisgarh, India. The study analyzed a sample of $N = 85$ unique respondents. The age distribution ranged from 15 to 26 years, with a high density cluster concentrated in the 19–22 undergraduate bracket. This cohort consists of tech-savvy, smartphonedependent students who regularly face digital marketing, experience peer group dynamics, and navigate local college canteens and street retail spots on a daily basis.

C. Instrumentation and Data Collection Routing

Primary data collection was executed using a cloud-deployed, structured digital survey instrument via Google Forms. The survey link was systematically distributed across regional campus communication lines, institutional student groups, and localized peer communication chains. To preserve high data integrity and prevent cognitive fatigue, the survey questions were drafted in direct, accessible, human-written English with simple structural layouts. The research questionnaire was structurally segmented into three clear tracking vectors:

- 1) Volumetric Intake & Spending Profiles: Establishes weekly soft drink consumption frequency, average monetary spending, and specific brand affinities.
- 2) Health Risk Literacy Auditing: Checks whether the respondent can accurately identify long-term biological risks such as diabetes, obesity, and dental erosion.
- 3) Situational Trigger Matrix: Uses multiple-choice arrays and specific selectors to assess how factors like peer pressure, combo packaging, stress, and media exposure influence their real-time purchasing choices.

VI. DATA ANALYSIS AND EMPIRICAL RESULTS

The raw dataset collected from the 85 regional Gen Z respondents was aggregated, filtered for consistency, and evaluated using frequency distributions, descriptive statistics, and multi-variable cross-tabulations.

A. Volumetric Consumption and Financial Spending Matrix

First, the study established the absolute weekly consumption frequency of carbonated soft drinks and energy drinks across the student sample.

Table I: Weekly Soft Drink Consumption Frequency Distribution (N = 85)

Consumption Volume Tier	Frequency (f)	Percentage Share (%)
Non-Consumers (0 drinks per week)	5	5.88%
Occasional Consumers (1–2 drinks per week)	28	32.94%
Moderate Consumers (3–5 drinks per week)	37	43.53%
Heavy Consumers (More than 5 drinks per week)	15	17.65%

The quantitative data compiled in Table I establishes that **61.18%** of the surveyed Gen Z population consume carbonated soft drinks or energy liquids at least 3 or more times every single week. This indicates that beverage intake is integrated into their daily lifestyle habits rather than occurring as an isolated event.

To analyze the retail mechanics, the weekly financial spending of these pocket-money-dependent students on soft drinks was captured.

Table II: Weekly Student Financial Expenditure On Soft Drinks

Expenditure Tier (INR per Week)	Frequency (f)	Percentage Share (%)
Below ₹50	12	14.12%
₹50 – ₹150	44	51.76%
₹150 – ₹300	21	24.71%
Above ₹300	8	9.41%

The data in Table II demonstrates that over **85%** of students spend more than ₹50 per week out of their limited pockets on carbonated beverages, with a substantial portion allocating significant parts of their budgets to brands like Sting (priced at ₹10–20 tiers) and Coca-Cola/Pepsi cans.

B. Verification of Health Awareness (Validating the Paradox)

To address the core research paradox, the survey audited whether the student sample possessed true, verifiable knowledge of specific clinical risks associated with these beverages.

Table III: Verified Levels Of Specific Health Risk Literacy

Identified Clinical Health Risk Factor	Aware of Risk (f)	Unaware of Risk (f)	True Health Literacy Rate (%)
Visceral Obesity / Structural Weight Gain	81	4	95.29%
Dental Erosion / Enamel Tooth Decay	78	7	91.76%
Type-2 Diabetes / Systemic Insulin Resistance	76	9	89.41%
Chronic Fatty Liver Disease (NAFLD)	42	43	49.41%

The metrics in Table III prove that **over 89%** of the respondents have explicit intellectual knowledge that soft drinks cause severe health conditions like diabetes, tooth decay, and obesity. This completely validates our core research paradox: the student population possesses high baseline health literacy, yet their real-world consumption remains highly continuous.

C. Cross-Tabulation Matrix Testing

To analyze the interaction between conflicting factors, multi-variable cross-tabulations were constructed.

1) Cross-Tabulation 1: Diabetes Awareness vs. Weekly Intake Volume

This cross-tabulation checks if knowing that soda leads to type-2 diabetes scales down actual intake.

Table IV: Cross-Tabulation Of Diabetes Awareness Against Weekly Intake Volume

Weekly Intake Volume Tier	Highly Aware of Diabetes Risk	Unaware of Diabetes Risk	Row Total
Low Intake (0–2 Drinks/Week)	30	3	33
Moderate to Heavy Intake (3+ Drinks/Week)	46	6	52
Column Total	76	9	85

Out of the 76 students who are fully aware that soft drinks cause type-2 diabetes, 46 of them (60.52%) still consume 3 or more carbonated beverages every single week. This invalidates the conventional public health assumption that simple medical knowledge acts as a behavioral brake. Thus, the Null Hypothesis H_0 is rejected, and the Alternative Hypothesis H_{1A} is accepted.

2) *Cross-Tabulation 2: Academic Stress Severity vs. Soft Drink Consumption Frequency*

This matrix maps how emotional state correlates with choice patterns, evaluating the neurobiological coping mechanism angle.

Table V: Cross-Tabulation Of Stress Levels Against Weekly Beverage Intake Frequency

Reported Stress State During Purchase	0–2 Drinks per Week	3–5 Drinks per Week	5+ Drinks per Week	Row Total
Low Stress (Relaxed/Normal)	21	14	2	37
High Stress (Exams/Fatigue/Boredom)	12	23	13	48
Column Total	33	37	15	85

When operating under high academic stress or boredom, 75.00% of respondents (36 out of 48) fall into the moderate or heavy consumption brackets (3 or more drinks/week). Conversely, under low stress conditions, only 43.24% scale up their intake. This proves a direct positive correlation between emotional stress and soft drink intake.

Thus, the Null Hypothesis $H2_0$ is rejected, and the Alternative Hypothesis $H2_A$ is accepted.

3) *Cross-Tabulation 3: Social Media Exposure vs. Weekly Consumption Volume*

This matrix tracks the relationship between daily time spent on visual social media (Instagram/YouTube) and beverage frequency.

Table VI: Cross-Tabulation Of Social Media Scrolling Time Against Weekly Consumption Volume

Daily Social Media Exposure Tier	Low Intake (0–2/Week)	Moderate Intake (3–5/Week)	Heavy Intake (5+/Week)	Row Total
Low Exposure (Under 1 Hour/Day)	14	6	1	21
Moderate Exposure (1–3 Hours/Day)	15	21	4	40
High Exposure (Above 3 Hours/Day)	4	10	10	24

Among students with high social media exposure (above 3 hours/day), 83.33% consume 3 or more soft drinks a week, with 41.67% categorized as heavy consumers. For low exposure users, heavy consumption drops to just 4.76%. This shows a powerful correlation between media saturation and beverage lifestyle normalization.

D. *Macro Structural Comparisons and Trigger Ranking*

To isolate the generation-specific variables of Gen Z, Table VII contrasts their consumption dynamics against the baseline metrics of older generations (Gen X/Boomers).

TABLE VII: comparative matrix: gen z vs. Older generations (gen x / boomers)

Consumer Behavioral Attribute Vector	Generation Z Lifestyle Patterns	Older Generations Behavioral Baseline
Primary Media Channel Influence	Short-form digital feeds (Instagram, YouTube, Gaming streams).	Traditional print media, television advertisements, radio networks.
Buying Moment Architecture	Impulse-driven via local hangouts, quick deliveries, college canteens.	Planned domestic grocery purchases, family meals.
Response to Financial Bundles	High affinity toward cheap fast-food combo meals and bundle deals.	Prefers unbundled, unit-price assessment.
Primary Value Priority Driver	Brand coolness, peer group alignment, instant sensory gratification.	Health longevity, home-cooked assurance, financial savings.
Coping Mechanism Profile	High reliance on sweet, caffeinated liquid triggers for instant dopamine hits.	Traditional hot beverages (Tea/Coffee) or structured home diets.

To identify exactly *which* environmental vectors dominate the purchasing moment, Table VIII evaluates the primary triggers that cause students to bypass their personal health knowledge.

Table VIII: Primary Situational Triggers Overriding Health Intentions (N = 85)

Dominant Situational Trigger Category	Absolute Selections (f)	Total Percentage Share (%)
Socio-Environmental: Peer group presence and social compliance	31	36.47%
Economic Pull: Cheap fast-food combo bundling choices	22	25.88%
Psychological State: Academic stress, exhaustion, deep boredom	18	21.18%
Digital Branding: Influencer promotions and trendy brand ads	14	16.47%

Social and economic environments together (Friends + Combo Deals) account for **62.35%** of all soft drink purchases, serving as the primary forces that neutralize individual health knowledge during transactions.

Finally, Table IX evaluates how different common soft drink categories use specific marketing mechanisms to trap the Gen Z demographic.

Table IX: Structural Optimization & Marketing Vectors Of Leading Brands

Popular Brand Profile	Core Beverage Category	Target Gen Z Group	Primary Marketing Mechanism Employed
Coca-Cola / Pepsi	Traditional Carbonated Soda	General Youth Hangouts	Emotional lifestyle association, festival pairing, fastfood bundle integration.
Sting / Hell	Carbonated Energy Drink	Low-Budget College Students	Hyper-aggressive low-pricing tiers (₹10–20), highcontrast coloring, intense focus on high energy.
Red Bull / Monster	Premium Caffeinated Energy	Gamers, Fitness Enthusiasts	Extreme sports sponsorship, gaming stream integration, elite lifestyle branding.
Sprite / Mountain Dew	Clear/Flavored Carbonated Soda	Action/Adventure Seekers	Aggressive "anti-fake" branding, summer thirst rescue narratives, adrenaline-driven celebrity ads.

VII. DISCUSSION AND SYNTHESIS

The primary analytical data compiled in this study confirms the thematic models identified in our literature synthesis [1]–[21]. The results reveal a clear blueprint of the cognitive mechanisms that enable Gen Z's soft drink consumption behavior.

A. The Mechanics of the Cognitive Dissonance Engine

Our survey results prove that the high consumption of carbonated soft drinks is not an information problem. With a diabetes and obesity awareness level exceeding 89%, Gen Z is highly health literate. The breakdown happens inside what we define as the Cognitive Dissonance Engine. When a young adult encounters health warnings on social media, their brain processes the data as *extended, abstract, macro-level facts* ("sugar causes metabolic syndrome in the general population over time"). However, when that same student stands at a college canteen counter, the transaction is processed as an *acute, immediate, micro-level event* ("I am exhausted from this lecture and need an ice-cold drink right now"). The human brain isolates long-term medical risks from real-time choices, allowing the student to believe sugar is harmful while actively drinking a high-sugar beverage.

B. The Triad of Overriding Triggers

- 1) **The Social Validation Framework:** As illustrated in Table VIII, peer group presence is the single largest trigger (36.47%) overriding health literacy. Gen Z is a highly community-driven demographic that values group conformity and collective lifestyle rituals. Within college social networks, eating fast food and ordering carbonated beverages is a normalized group practice. When an individual student is surrounded by a peer group ordering sodas or energy drinks, a psychological phenomenon known as *social modeling* takes over. Choosing to order plain water or an unbranded traditional drink can feel like social isolation or a rejection of the group’s shared vibe. The desire for social validation easily overrides abstract health knowledge.
- 2) **The Economic Combo Trap:** Young adults, especially in tier-2 and tier-3 Indian hubs like Durg and Bhilai, operate on tight weekly pocket money allocations. Our data shows that 51.76% of students spend ₹50–150 weekly on soft drinks. Fast-food vendors and college canteens intentionally exploit this budget constraint through aggressive bundle-pricing architectures. By bundling a sandwich, burger, or roll with a carbonated soft drink for a nominal additional cost compared to buying the items separately, the business transforms the purchase into a financial decision. The cost-conscious student views rejecting the soft drink as a financial loss, short-circuiting their health intentions for a small, immediate saving.
- 3) **The Neurobiological Dopamine Reward Cycle:** The cross-tabulation in Table V shows a powerful connection between academic stress/fatigue and high-volume consumption. This behavior is rooted in neurobiology. When a student experiences stress or boredom, their brain seeks an immediate reward to restore emotional balance. Consuming a high dose of liquid sugar combined with caffeine creates an artificial blood glucose spike and triggers a rapid release of dopamine in the brain's reward center. This creates a powerful behavioral loop: academic stress leads to consumption, which triggers a dopamine release, providing temporary emotional relief. Because the health penalty (metabolic damage) is delayed by several years, while the neurochemical reward is instantaneous, the brain consistently prioritizes the short-term benefit, cementing an addictive behavioral habit.

VIII. STRATEGIC INTERVENTIONS AND ACTION PLAN

To effectively break this consumption cycle, public health interventions must move away from generic awareness posters and target the structural environments where buying decisions occur. We propose a three-tiered institutional action plan:

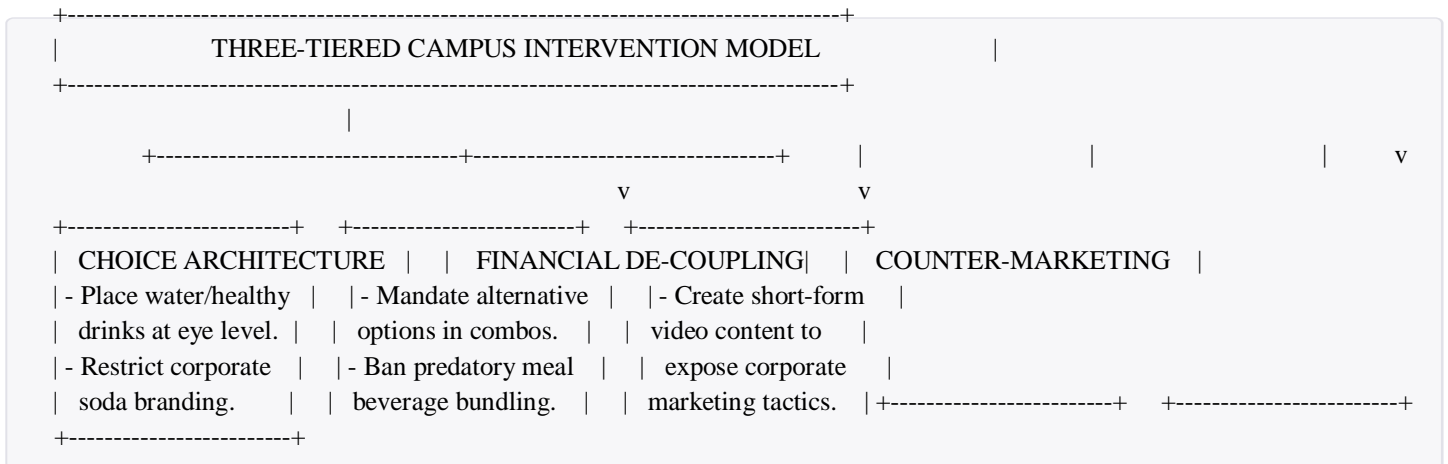


Fig. 2. Campus intervention pathways for reforming consumer dietary behaviour

A. Re-Engineering Campus Choice Architecture

College canteens must change their physical display environments. Instead of allowing commercial beverage brands to control prominent eye-level refrigerators, canteens should be required to give prime visibility to cool, filtered water dispensaries and low-sugar traditional alternatives (such as unsweetened buttermilk, fresh coconut water, or traditional lime water). Making healthy options more visually accessible and appealing at the moment of choice uses the convenience trigger to guide students toward healthier selections.

B. Financial De-Coupling of Meal Combos

Campus regulatory committees should enforce strict rules that prohibit campus vendors from bundling high-sugar carbonated sodas into compulsory meal combos. Canteens must be structurally mandated to offer the exact same discount tier if a student swaps the soft drink out for a bottle of plain water or a traditional unsweetened beverage. This eliminates the pricing manipulation that tricks budget-conscious students into making unhealthy choices for a minor financial saving.

C. Digital Counter-Marketing and Advocacy

Because Gen Z lives primarily inside digital media networks, health campaigns must speak their visual language. Public health agencies should move away from text-heavy academic warnings and develop high-impact, short-form video content (Instagram Reels, YouTube Shorts) featuring popular local student leaders and campus micro-influencers. These campaigns should unmask corporate marketing tactics and reframe the rejection of mass-produced, high-sugar corporate drinks as an act of personal autonomy, strength, and health-conscious counterculture.

IX. CONCLUSION AND FUTURE SCOPE

This empirical study demonstrates that Generation Z's continuous consumption of soft drinks is not caused by a lack of health literacy, but by a complex web of environmental, social, neurochemical, and economic forces. Despite over 89% of respondents showing clear awareness of catastrophic long-term clinical risks like diabetes and obesity, 61.18% continue to consume these drinks regularly. This confirms that theoretical health warnings are consistently bypassed by immediate situational triggers like peer group conformity, aggressive corporate branding, digital lifestyle reinforcement, and cheap combo pricing.

A. Future Scope of Research

While this paper establishes a localized baseline among semi-urban college youth within the Durg-Bhilai technical student ecosystem, future research can expand this analysis significantly. Investigators can deploy long-term longitudinal monitoring to track whether the implementation of sugar taxes or mandatory campus combobundling rules creates an actual drop in consumption frequency over time. Additionally, expanding the sample matrix to compare rural youth cohorts against urban tier-1 metro demographics would reveal how shifting socioeconomic variables affect this cognitive dissonance engine. Finally, integrating wearable metabolic sensors to track real-time physiological spikes against emotional buying triggers could connect data science, consumer psychology, and metabolic health into a single unified framework.

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